

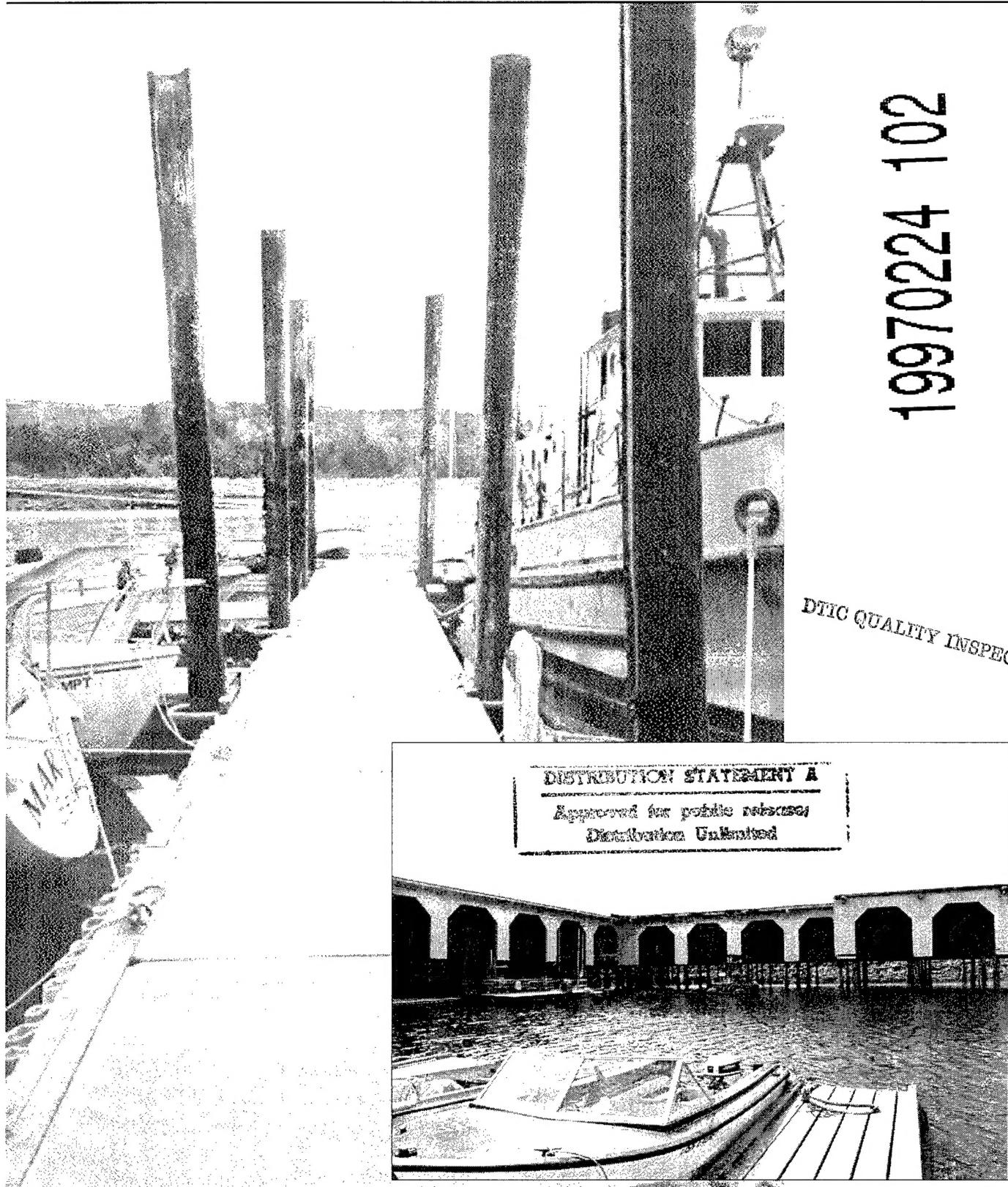
NAVAL AIR STATION, WHIDBEY ISLAND

Oak Harbor, Washington



**ENVIRONMENTAL ASSESSMENT
MWR Marina Renovation at Seaplane Base, NASWI**

February 1997



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DEPARTMENT OF DEFENSE
DEPARTMENT OF THE NAVY

FINDING OF NO SIGNIFICANT IMPACT FOR THE MORAL, WELFARE, AND RECREATION MARINA RENOVATION AT NAVAL AIR STATION WHIDBEY ISLAND, OAK HARBOR, WASHINGTON

Pursuant to Council on Environmental Quality Regulations (40 CFR Parts 1500-1508) implementing procedural provisions of the National Environmental Policy Act (NEPA), the Department of the Navy gives notice that an Environmental Assessment (EA) has been prepared and an Environmental Impact Statement is not required for the Moral, Welfare, and Recreation (MWR) marina renovation at Naval Air Station Whidbey Island (NASWI), Oak Harbor, Washington.

The proposed action includes: (a) demolition of the existing Navy boat house at Seaplane Base, NASWI, Island County, Washington; (b) construction of a new MWR marina at the existing place which would be capable of serving 60 boats; and (c) removal of 18 mooring buoys in Crescent Harbor and relocation of the 18 moored boats to the new marina. The boar house was closed in 1993 by order of the NASWI Fire Department because of the structure's deteriorating condition. Upon completion of the MWR marina renovation, the facility would have 60 boat berthing slips with no mooring buoys. The slips would house approximately five boats from various NASWI departments including environmental (spill response), supply (fuel operations), and explosive ordnance disposal (EOD). Approximately 55 slips would accommodate various recreational pleasure craft and Sea Scout boats. No dredging would be required. No in-water fueling, in-water sewage disposal, or in-water major boat maintenance would occur at the MWR marina. Demolition of the boat house would occur during 1997 with renovation of the marina occurring over a 5-year period from 1998 to 2002.

Under a "no action" alternative as required by NEPA, the Navy would not implement the proposed action and would not satisfy current or future Navy needs. The "No Action" alternative was considered and subsequently eliminated because: (1) the existing hazards associated with the boat house would not be removed, (2) the in-water boat slip capacity following the closure of the boat house would not be restored at Seaplane Base, (3) MWR marina user needs in the region would not be met, and (4) no removal of the 18 moored boats on buoys in Cresent Harbor would occur.

Four other renovation options were considered: (1) Partial Demolition with 22 Slips Provided, (2) Complete Demolition with No Slips Provided, (3) Rehabilitate Existing Boat House with 22 Slips Provided, and (4) Renovation and Modification with 38 Slips Provided. These four options were eliminated because they do not

meet one or several evaluation criteria set forth in the renovation options evaluation process. The criteria include: remove building safety hazards at the boat house, create a safe MWR marina at Seaplane Base and restore in-water boat slip capacity to the condition prior to the closure of the boat house, expand the MWR marina capacity to meet increased demand for pleasure boat moorage in the northern Puget Sound area, minimize the project cost, eliminate 18 mooring buoys in Crescent Harbor by providing slips in a more protected area (such as the marina), and minimize environmental effects.

The proposed renovation of the marina would consist of a series of new concrete floats in a "C" configuration. These concrete floats would be attached to existing or reused piles.

Approximately 26 new finger floats would be attached to the main floats to create double slips. Approximately 60 slips would be provided to accommodate various MWR and NASWI uses. Water and electrical service at the marina would be expanded to the new boat slips from existing utility lines at the boat house.

Approximately 82 piles would be removed during demolition of the boat house and approximately 18 reused or new piles would be installed within the same area.

Initial demolition of the boat house would occur during 1997. Because the boat house, built in 1942 and expanded in 1944, may be eligible for the National Register of Historic Places, the Navy has taken appropriate measures to address the historic aspects of the building. In accordance with a Memorandum of Agreement between NASWI and the State Historic Preservation Officer (SHPO), the Navy will complete an Historic American Buildings Survey of the boat house and will install an interpretive display at or near the current structure. SHPO concurred that there are no other significant archeological resources at or near the project site.

Demolition of the boat house and removal and reuse of the piles would not cause any significant effects on biological resources. The Navy will conduct major demolition work, heavy equipment construction, and pile driving activities only during the authorized construction period (outside of the period from January 15 to August 15) to minimize disturbance to bald eagles during the nesting and wintering period. The Navy will also schedule in-water construction activities to avoid the March 15 to June 15 mitigation window to eliminate potential effects to juvenile anadromous fish migrating from fresh to saltwater. The U.S. Fish and Wildlife Service has concurred with the Navy determination that the proposed action is not likely to adversely affect endangered species.

The project area is within the Whidbey Island air basin of the Puget Sound Air Pollution Control Agency and is currently designated as "attainment" for all criteria air pollutants. Construction activities associated with the proposed project would generate locally elevated levels of air pollutants, primarily suspended particulate matter, resulting from operation of heavy-duty construction equipment, fill/haul truck trips, and construction worker commute trips. These impacts are localized, temporary, and will be mitigated by applying dust control measures. Air emissions from the proposed new MWR marina project are determined to be small and would not interfere with the State Implementation Plan's purpose to eliminate or reduce the number and severity of violations of the national ambient air quality standards.

No significant hazardous materials/waste management impacts would occur from the proposed action. No impacts to either water resources or geology/soils resources would occur. The proposed action would not result in any disproportionately high and adverse human health or environmental effects on minority and low-income populations.

Based on information gathered during preparation of the EA, the Navy finds that the Moral, Welfare, and Recreation Marina renovation at Naval Air Station Whidbey Island, Oak Harbor, Washington, will not significantly impact human health and the environment.

The EA addressing this action may be obtained from: Commanding Officer, Engineering Field Activity Northwest, Naval Facilities Engineering Command, 19917 7th Avenue N.E., Poulsbo, Washington 98370-7570 (Attention: Ms. Kimberly Kler, Code 232KK); telephone (360) 396-0927.

15 January 1991
Date

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MWR Marina Renovation

Environmental Assessment

**NAVAL AIR STATION, WHIDBEY ISLAND
OAK HARBOR, WA
DEPARTMENT OF THE NAVY**

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February 1997

ABSTRACT

The Department of the Navy (Navy) has prepared this Environmental Assessment (EA) to evaluate the potential environmental effects associated with the renovation of the existing Morale, Welfare, and Recreation (MWR) Department Marina at Seaplane Base, Naval Air Station, Whidbey Island (NASWI), Island County, Washington. Renovation would include demolition of an old, "L"-shaped, wooden boat house (Building 19) at the MWR Marina in Crescent Harbor. In its place, the Navy would develop an expanded uncovered marina capable of serving 60 boats. The renovated marina, like the existing marina, would continue to be operated by NASWI's MWR Department. The number of boat slips at the MWR Marina would be increased from the current 11 slips, plus 18 mooring buoys, to 60 slips with no mooring buoys. The slips would house approximately five boats from various NASWI departments including environmental (spill response), supply (fuel operations), and explosive ordnance disposal (EOD). Approximately 55 slips would accommodate various recreational pleasure craft and Sea Scout boats. Upon completion of the marina renovation, the 18 mooring buoys located in Crescent Harbor nearby would be removed and the boats moored at these buoys would be relocated to slips. No dredging would be required. In addition, no in-water fueling, in-water sewage disposal, or in-water major boat maintenance would occur at the MWR Marina.

Initial demolition of the boat house would occur during 1997. It is anticipated that the large wooden timbers would be salvaged and sold. Many of the existing piles, however, would be reused. Approximately 82 piles would be removed during demolition and 18 piles installed in the same area. The boat house was closed in 1993 by order of the NASWI Fire Department because of the structure's deteriorating condition. Since closure of the boat house, all asbestos-containing material has been removed from the structure including its exterior siding. Because the boat house may be eligible for the National Register of Historic Places (Department of the Navy 1994), the Navy has taken appropriate measures to address the historic aspects of the building. In accordance with a Memorandum of Agreement (MOA) between NASWI and the State Historic Preservation Officer (SHPO), the Navy will complete an Historic American Buildings Survey (HABS) of the boat house and will install an interpretive display at or near the current structure.

After initial demolition, marina renovation would consist of the reuse of existing structures, such as piles, plus installation of new concrete floats. As part of the marina renovation, many of the existing creosote-treated piles and the corner wooden floor area of the boat house would be reused. The existing bulkhead would remain and the corner deck area would become an observation and picnicking area. Water and electrical service at the MWR Marina would be expanded to service the new slips and to improve safety.

Principal areas of concern addressed in this EA include potential effects to historical resources, water quality, and wildlife and fishery resources. Based on the analysis in this EA, a Finding of No Significant Impact (FONSI) is recommended and the preparation of an Environmental Impact Study (EIS) is not required.

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ACRONYMS AND ABBREVIATIONS

AICUZ	Air Installation Compatible Use Zone
APZ	Accident Potential Zone
BEAP	Base Exterior Architecture Plan
BMPs	Best Management Practices
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
COE	U.S. Army Corps of Engineers
CZMP	Coastal Zone Management Plan, State of Washington
dB	decibels
dBA	decibels-A weighted
DoD	Department of Defense
EA	Environmental Assessment
ECT	Electronic Combat Training
EDNA	Environmental Designation for Noise Abatement
EIS	Environmental Impact Statement
EOD	Explosive Ordnance Disposal
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FONSI	Finding of No Significant Impact
FR	Federal Register
gpm	gallons per minute
HABS	Historic American Buildings Survey
HARP	Historic and Archaeological Resources Protection
HPA	Hydraulic Project Approval
IAC	Interagency Committee for Outdoor Recreation
ICGWMP	Island County Ground Water Management Program
JARPA	Joint Aquatic Resources Permit Application
Ldn	Day-night sound level
LOS	Level of service- roadways
lpm	litres per minute
MOA	Memorandum of Agreement
mph	miles per hour
MTMC	Military Traffic Management Command
MWR	Morale, Welfare, and Recreation
NAAQS	National Ambient Air Quality Standards
NASWI	Naval Air Station, Whidbey Island
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NPDES	National Pollution Discharge Elimination System
NRHP	National Register of Historic Places, or National Register
NWI	National Wetland Inventory

ACRONYMS AND ABBREVIATIONS (continued)

NWAPA	Northwest Air Pollution Authority
OAHP	Office of Archaeology and Historic Preservation, State of Washington
PL	Public Law
ppm	parts per million
PS	Public Works/Supply (land use designation)
PSAPCA	Puget Sound Air Pollution Control Agency
RC	Recreation/Community Support (land use designation)
SHPO	State Historic Preservation Officer
SMA	Shoreline Management Act
SMMP	Shoreline Management Master Program
SR	State Route
TR	Training (land use designation)
TSP	total suspended particulates
USC	U.S. Code
USFWS	U. S. Fish and Wildlife Service
WAC	Washington Administrative Code
WDFW	Washington Department of Fish and Wildlife
WDOE	Washington State Department of Ecology
WSDOT	Washington State Department of Transportation

1.0 INTRODUCTION

The Department of the Navy (Navy) has prepared this Environmental Assessment (EA) to evaluate potential environmental effects associated with the proposed renovation of the Morale, Welfare, and Recreation (MWR) Department Marina (MWR Marina) at Seaplane Base, Naval Air Station, Whidbey Island (NASWI). The MWR Marina is located in Crescent Harbor near the City of Oak Harbor, Washington. Renovation would include demolition of the MWR Marina boat house (Building 19), which was constructed in 1942 and expanded in 1944. The environmental effects are addressed in this EA pursuant to the requirements of the National Environmental Policy Act (NEPA) and subsequent implementing regulations issued by the Council on Environmental Quality (CEQ) (40 CFR 1500).

The MWR Department at NASWI is a Department of Defense (DoD) organization within the U.S. military services that is responsible for the morale, welfare, and recreation of active-duty military personnel, dependents, military retirees, and DoD civilians. MWR departments at coastal installations, such as NASWI, often provide pleasure boat rental and moorage as part of their recreation program. The MWR Department at NASWI has provided this service at the Seaplane Base in Crescent Harbor since the 1970s when the boat house was partially converted to MWR recreational use. The MWR Marina is on DoD property and is the only MWR marina in the northern Puget Sound area.

MWR Marina facilities at NASWI currently include the old boat house, new concrete floats that service approximately 11 boats, and 18 mooring buoys in Crescent Harbor. No in-water boat fueling, in-water sewage disposal, or in-water major boat maintenance facilities are provided at the MWR Marina. Approximately three years ago, the MWR Marina served between 25 and 35 boats in slips at the boat house, and 18 additional boats on mooring buoys in the harbor. However, because of its unsafe and deteriorating condition, the boat house was closed by the NASWI Fire Department in 1993. It has been locked and vacant since it was declared unsafe and building materials containing asbestos, such as the building's siding, have been removed. Water and electrical service to boat slips at the marina has been terminated and has been unavailable since the closure of the boat house.

Proposed renovation of the MWR Marina is intended to remove the existing safety hazards of the boat house and to expand the marina to help meet the need for additional boat slips in the region. Renovation would occur between 1997 and 2002 and would initially involve demolition of much of the boat house. Many of the existing piles, however, would be reused to secure new concrete floats. In its place, the Navy would develop an uncovered marina capable of serving approximately 60 boats. The slips would house approximately five boats from various NASWI departments including environmental (spill response), supply (fuel operations), and explosive ordnance disposal (EOD). Approximately 55 slips would accommodate various recreational pleasure craft and Sea Scout boats. Upon completion of the marina renovation, the 18 mooring buoys in

Crescent Harbor would be removed and the boats moored at these buoys would be relocated to slips. Water and electrical service would be provided to the new boat slips. No dredging would be required during renovation. In addition, no in-water fueling, in-water sewage disposal, or in-water major boat maintenance would occur at the MWR Marina. The renovated marina, like the existing marina, would continue to be operated by the MWR Department.

The boat house may be eligible for the National Register of Historic Places (Department of the Navy 1994). As such, the Navy has taken appropriate measures to address the historic aspects of the building. In accordance with a Memorandum of Agreement (MOA) between NASWI and the State Historic Preservation Officer (SHPO) (see Appendix B), the Navy will complete an Historic American Buildings Survey (HABS) of the boat house and will install an interpretive display at or near the structure.

1.1 AUTHORITY AND JURISDICTION

This EA was prepared in compliance with the statutory requirements of NEPA, as amended by Public Law (PL) 91-190, 42 USC 4347. Conformance with this law is being carried out under the provisions of the Navy's *Environmental and Natural Resources Program Manual* (OPNAVINST - 5090.1B, Nov. 1, 1994). As stated in OPNAVINST - 5090. 1B - Chapter 2-4.3.1:

"An EA is an analysis of the potential environmental impact of a proposed action. When the military does not know before-hand whether or not the proposed action will significantly affect the human environment or be controversial with respect to environmental effects, an EA is prepared. If on the basis of the EA, it is determined that the proposed action will not significantly impact the environment, a Finding of No Significant Impact (FONSI) will be prepared. Otherwise an Environmental Impact Statement (EIS) will be prepared."

The Navy must evaluate the Proposed Action (see Section 2.1) to determine the significance of potential effects and the adequacy of proposed mitigation measures. Based on this evaluation, the Navy will decide whether a FONSI is appropriate or whether the Proposed Action would generate significant effects, thus requiring preparation of an EIS. If the Navy's Proposed Action would not cause significant effects to the environment, the Navy will prepare a FONSI for local public notification. Public notification will consist of: (1) newspaper publication of a summary of the FONSI; and (2) direct mailing of the full FONSI and the completed EA to interested parties such as regulatory/resource agencies, libraries, elected officials, and others identified during preparation of the EA. In the event that a decision for a FONSI is made for this project, a notice shall run for three consecutive days in the "Public Notices" section of the *Whidbey News-Times*, a local newspaper with distribution in the area of the Proposed Action. If no decision for a FONSI is made, the Navy will prepare an EIS.

1.2 PURPOSE AND NEED

The MWR Department at NASWI has immediate and long-term needs at the MWR Marina at Seaplane Base. The purpose of the Navy's Proposed Action is to meet these needs through a phased approach as funding becomes available. The Navy's immediate needs include: (1) removal of the boat house (Building 19) because of its deteriorating condition and safety hazards, (2) development of a safe new marina that restores previous boat slip capacity lost with the closure of the boat house, and (3) additional revenue for marina operations and expansion and for other MWR programs at NASWI. The Navy's long-term needs include: (1) expansion of the marina capacity to help meet demand for additional pleasure boat rental moorage in the northern Puget Sound area; and (2) elimination of moored boats on buoys in Crescent Harbor because boats break loose during high wind conditions and rough seas, causing hazards to life and property. The Navy's immediate and long-term needs are discussed below.

Removal of the existing safety hazards at the boat house is an immediate need of the Navy. The boat house is in a deteriorating condition with roofing, flooring, and siding material falling into the water. The building was declared unsafe by the NASWI Fire Department in 1993 and is locked and uninhabitable. The siding on the boat house and other materials were removed by the Navy as part of an asbestos abatement program. The lack of siding has led to further deterioration of the building. Removal of the boat house is a high priority. Utility service to the boat house has been terminated because of safety concerns.

As a result of the closure, the Navy needs to develop a new safe marina that, at a minimum, restores previous boat slip capacity. Currently, 11 slips are available for use within the Marina adjacent to Building 19, with 18 additional boats moored on buoys in Crescent Harbor, for a total in-water capacity of 29 boats. Several boats stored on shore could be moored in the marina if there were additional in-water capacity. Prior to the closure of the boat house, the Navy serviced 25 to 35 boat slips in the boat house, plus 18 boats moored on buoys in Crescent Harbor, for a total in-water capacity of 43 to 53 boats (pers. comm., Score, 1996). The closure of the boat house, therefore, has resulted in a reduction of 14 to 24 in-water boat slips at this time. Existing MWR Marina boat slips, adjacent to the boat house, use new concrete floats and fingers attached to existing piles. Additional floats, fingers, and pedestrian access brows would be needed to increase the number of slips provided at this location. No other Navy properties on Whidbey Island are available to expand the MWR Marina.

Finally, the Navy has an immediate need to provide additional revenue for marina operations and expansion, and for other MWR programs at NASWI. MWR departments in the military services provide a wide range of recreational programs for active-duty military personnel, dependents, military retirees, and DoD civilians. Many MWR programs depend on general revenue sources, such as revenue generated at MWR marinas. These marinas often generate revenue that support not only the marina operation itself, but other MWR programs as well. Currently, the MWR Marina is not self-supporting and

provides no revenue for other MWR programs (pers. comm., Score, 1996). Therefore, the MWR program at NASWI is in need of an expanded marina to provide additional revenue to support the marina operations, as well as other MWR programs.

One of the Navy's long-term needs is expanding the MWR Marina capacity. Beyond replacing lost marina capacity with the closure of the boat house, additional marina capacity is needed to meet increasing recreational demand for pleasure boating in the northern Puget Sound area. A U.S. Army Corps of Engineers (COE) recreational small boat moorage study (COE 1980) projected that there would be 31,000 pleasure boats in the northern Puget Sound area (Skagit, Whatcom, Island, and San Juan counties) by the year 2000. Within the northern Puget Sound area, the study identified the need for a significant amount of additional pleasure boat rental moorage in summer and winter (1,668 additional boat moorage in summer and 651 in winter). The majority of this demand is for wet open moorage, as compared to other wet or dry moorage facilities. From 1987 to 2000, demand for ocean boating activities is expected to increase between 1.5% and 3.2% annually (Ocean Non-power Boating- 3.2%, Sailing- 2.6%, and Ocean Power Boating- 1.5%) (Washington IAC, 1990 and 1995). The COE boating study indicated a total rental moorage of 727 boats for the study area (COE 1980). This number has not changed significantly in the past 18 years, since few new rental boat slips have been constructed during this timeframe (pers. comm., Score, 1996). To meet the recreational boating needs of Navy and DoD active duty personnel and military retirees in this area, additional MWR boat slips are needed. Approximately 60 boat slips can be provided at Seaplane Base without constructing a breakwater (pers. comm., Rowe, 1996). Because of limited funding for this project, construction of a breakwater at Seaplane Base cannot be considered by the Navy. Because of the lack of a breakwater and the limited amount of harbor area protected without a breakwater, the number of possible rental boat slips at the MWR Marina is limited to 60. Assuming 60 boat slips may be constructed at this location, marina capacity would increase by 49 additional boat slips above current levels (31 more than existing capacity for slips and moorings), which would help meet the Navy's needs. This expansion, however, would provide only 25 to 35 additional boat slips as compared to the number of boat slips provided prior to closure of the boat house. There are no other MWR marinas on Whidbey Island that can be expanded.

Finally, the Navy has a long-term need to eliminate moored pleasure boats on buoys in Crescent Harbor. Approximately 18 boats are currently moored on buoys in Crescent Harbor adjacent to the MWR Marina. The harbor is not protected by a breakwater and it is too costly to install such a facility. During the last five years, high wind and rough sea conditions have caused six boats to break loose and crash against nearby rocks and shoreline (pers. comm., Score, 1996). During the winter of 1995-1996 alone, three boats (one Navy-owned powerboat and two privately owned sailboats) were destroyed, resulting in a loss of approximately \$28,000. In addition, Navy floating oil response booms are stored on shore nearby and are pulled by the Navy through the harbor area where the moored boats are located. Sometimes the moored boats on buoys create obstacles and hazards to oil response boom operations; booms are not deployed during severe weather (pers. comm., Score, 1996). The MWR Department needs to relocate these moored boats

over time to a more protected area, such as the marina, to eliminate the current problems and hazards (pers. comm., Score, 1996).

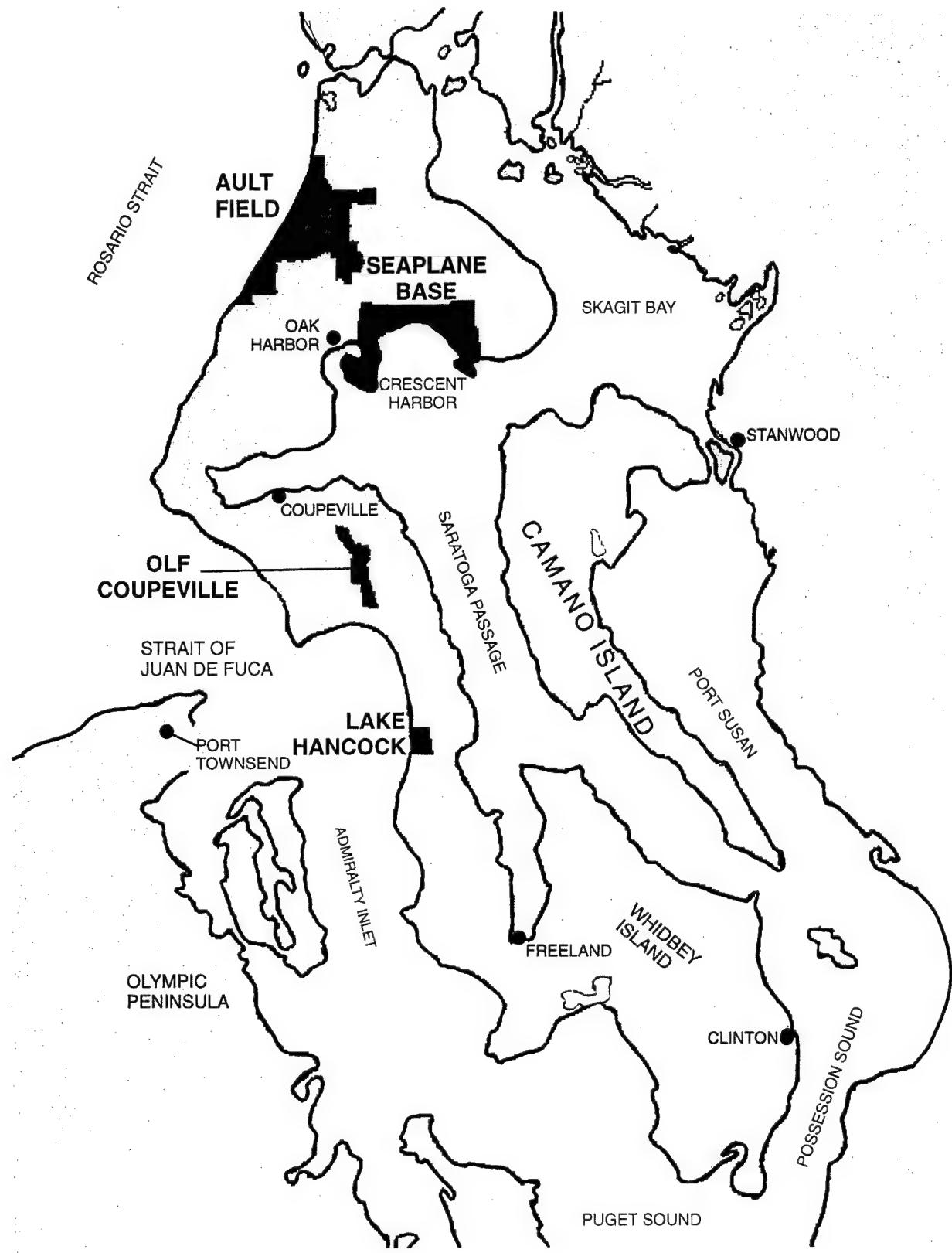
2.0 PROPOSED ACTION AND ALTERNATIVES

The following section describes the Navy's Proposed Action and alternatives evaluated in this EA. NEPA requires that the effects of the Proposed Action be evaluated for a reasonable range of alternatives and that these "action" alternatives be measured against an "existing condition" or No Action Alternative.

2.1 DESCRIPTION OF PROPOSED ACTION

The Navy proposes to renovate the existing MWR Marina at Seaplane Base, NASWI, Island County, Washington (Figures 2.1-1 through 2.1-3). The MWR Marina is located in Crescent Harbor near the City of Oak Harbor. Renovation would include demolition of the old wooden Navy boat house (Building 19) originally constructed in 1942 and expanded in 1944. The renovated marina, like the existing marina, would be operated by the MWR Department at NASWI for use by Navy and DoD active-duty military personnel, dependents, military retirees, and DoD civilians. The number of boat slips in the MWR Marina would be increased from the current 11 slips to up to 60 slips, the maximum number of slips possible without building a new harbor breakwater. These slips would house approximately five Navy boats from various departments including environmental (spill response), supply (fuel operations), and EOD. The remainder of the slips would accommodate various recreational and Sea Scout boats. Upon completion of the renovated marina, the Navy would remove all 18 existing mooring buoys in Crescent Harbor. The boats currently moored at these buoys would be relocated to the renovated marina. No dredging would be required for construction and no in-water fueling, sewage disposal, or major boat maintenance would occur during operation of the MWR Marina.

Demolition of the old boat house, except for the corner decking and several piles, would occur during 1997 over a 3-month period. It is anticipated that the large wooden timbers in the boat house would be salvaged and sold. Remaining debris would be transported by truck or barge to an approved landfill. A barge and crane would be required for demolition because of limited access from the shoreline. Pile removal and pile driving would occur during the initial 1997 demolition period only. A portion of the paved parking area between the EOD facility (Building 33) and the Navy Commissary/Exchange (Building 17) would be used as a construction staging area. Since the boat house may be eligible for inclusion in the National Register of Historic Places (NRHP, or National Register) (Department of the Navy 1994), the Proposed Action will include a HABS of the boat house and the installation of an interpretive display at or near the boat house. In accordance with an MOA between NASWI and the SHPO, the Proposed Action would include the preparation of a HABS of the boat house and the installation of an interpretive display at or near the boat house site.



Source: Department of the Navy 1988

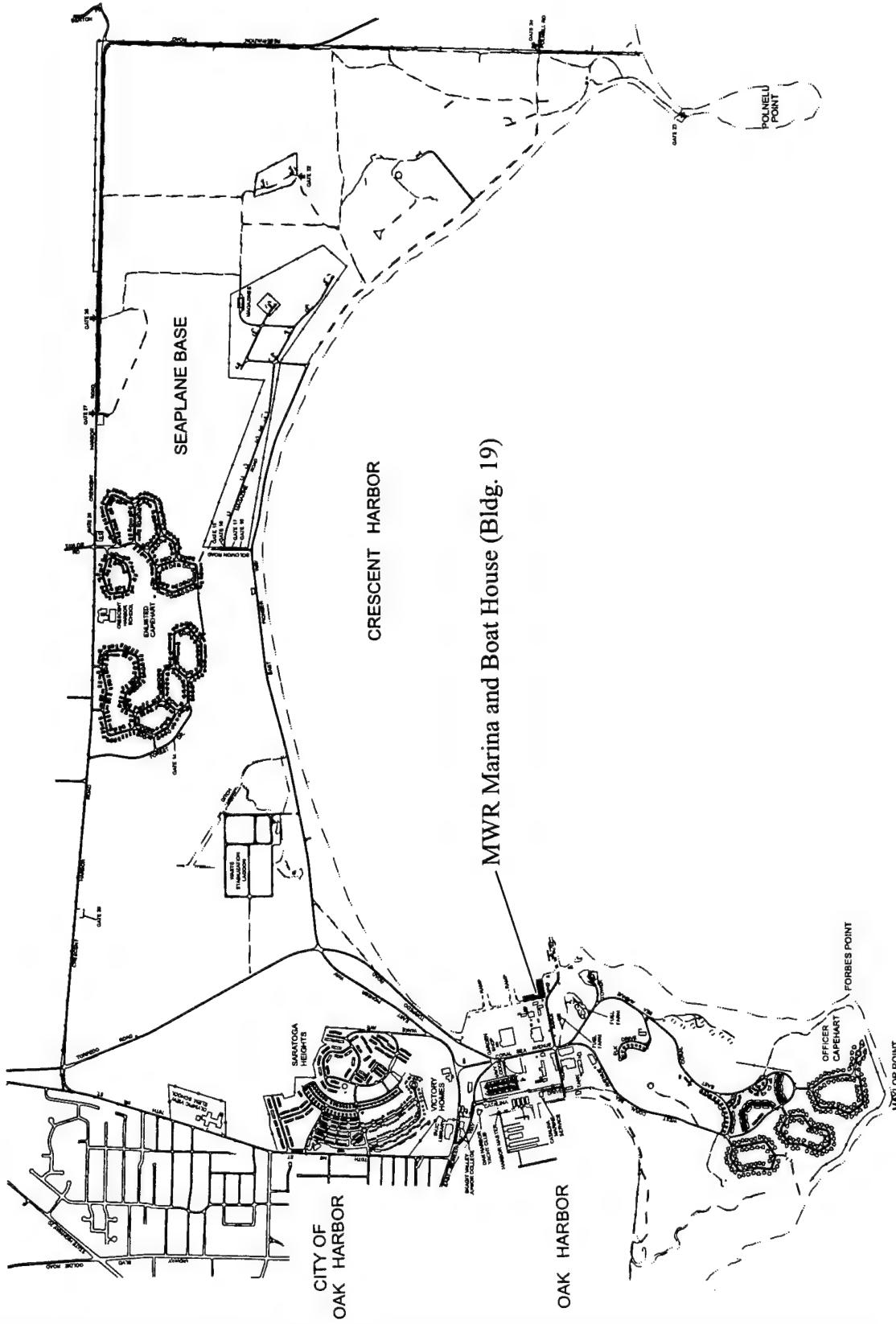


Not to Scale

Environmental Assessment
for MWR Marina Renovation
Seaplane Base, NASWI

**NASWI Facility Locations
on Whidbey Island**

Figure 2.1-1

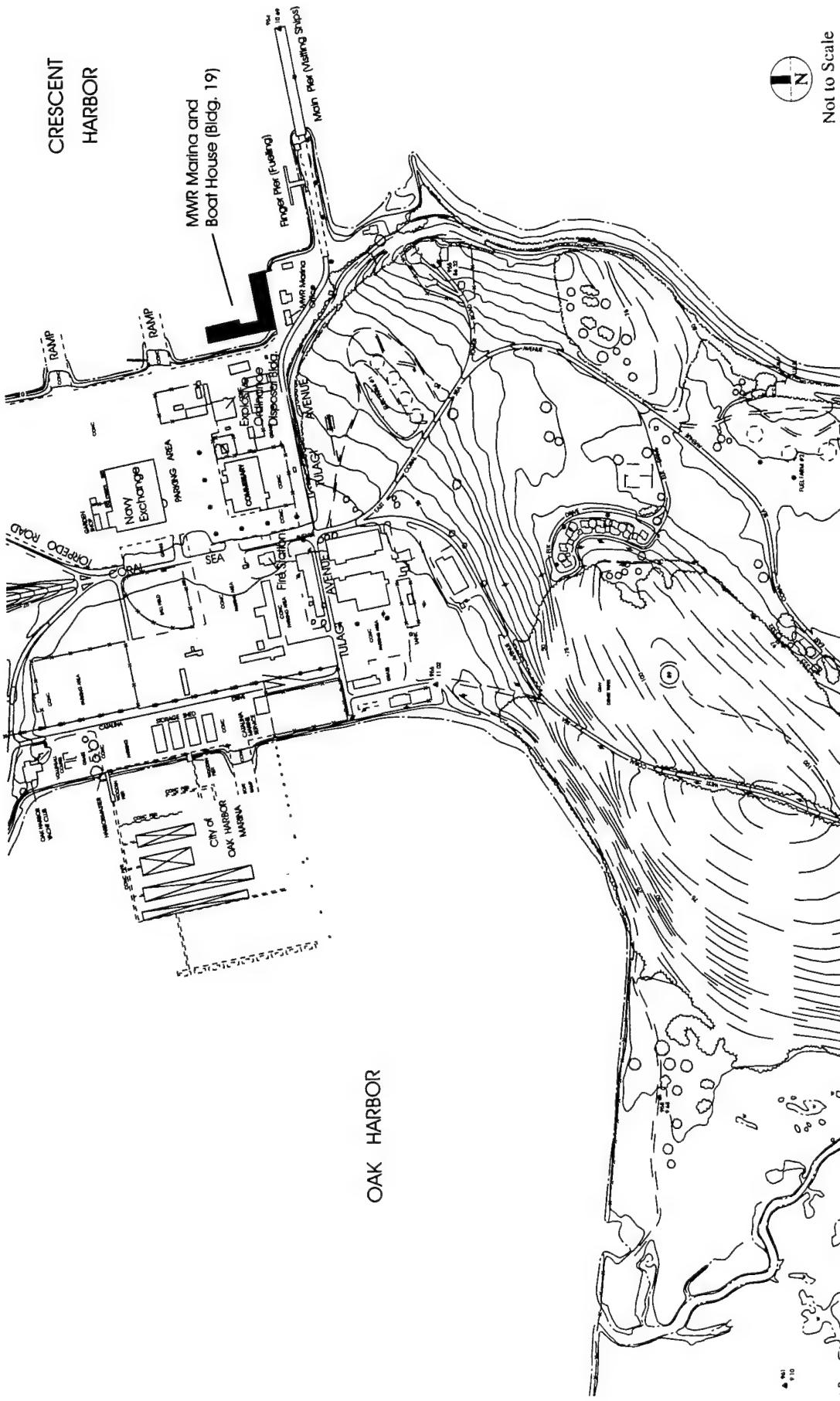


Source: Department of the Navy, 1988

Environmental Assessment
for MWR Marina Renovation
Seaplane Base, NASWI

Vicinity Map

Figure 2.1-2



Source: Department of the Navy 1988

Environmental Assessment for MWR Marina Renovation Seaplane Base, NASWI

Marina Location

Figure 2.1-3

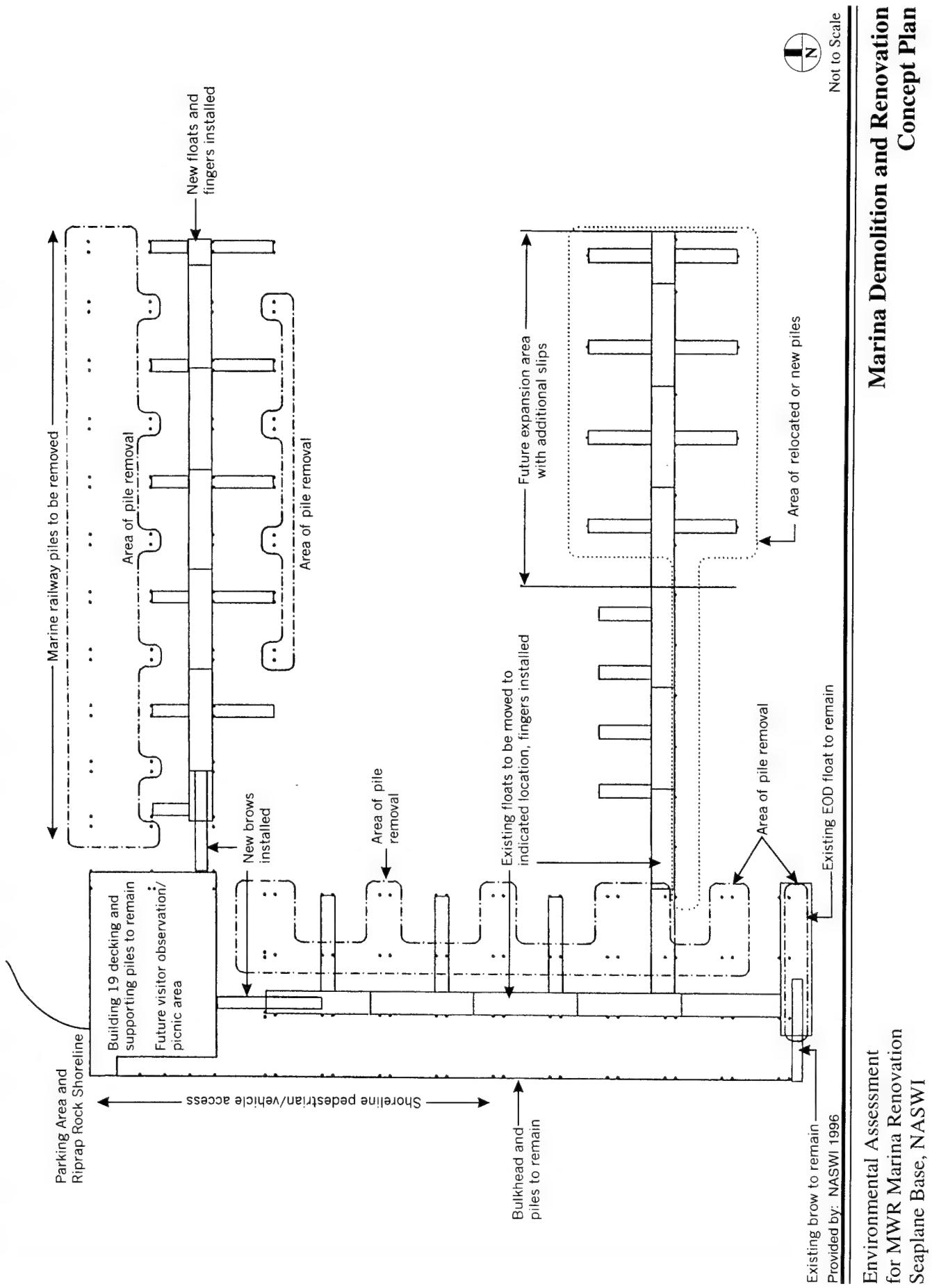
Marina renovation would consist of the reuse of some of the existing structural components, such as piles, plus installation of new floats, fingers, and brows. After initial demolition in 1997, the renovation would occur over a five-year period as funding becomes available, extending from 1998 to 2002. The renovated marina would be designed to be compatible with the surrounding natural and built environment. As such, the existing bulkhead and bulkhead piles at the marina would remain. New and existing dock brows would provide pedestrian access to the renovated marina. Concrete floats and fingers would be brought in by truck or barge and positioned in place between existing or new piles. Marina renovation construction would last a few days to a few months each year as additional floats are incrementally added to the existing MWR Marina. Water and electrical service at the marina would be expanded to new slips from existing utility service at the boat house. The MWR Marina would be open during much of the demolition and renovation work; however, pedestrian and/or boat access to some areas of the MWR Marina may be temporarily prohibited due to safety concerns and to allow for construction activity.

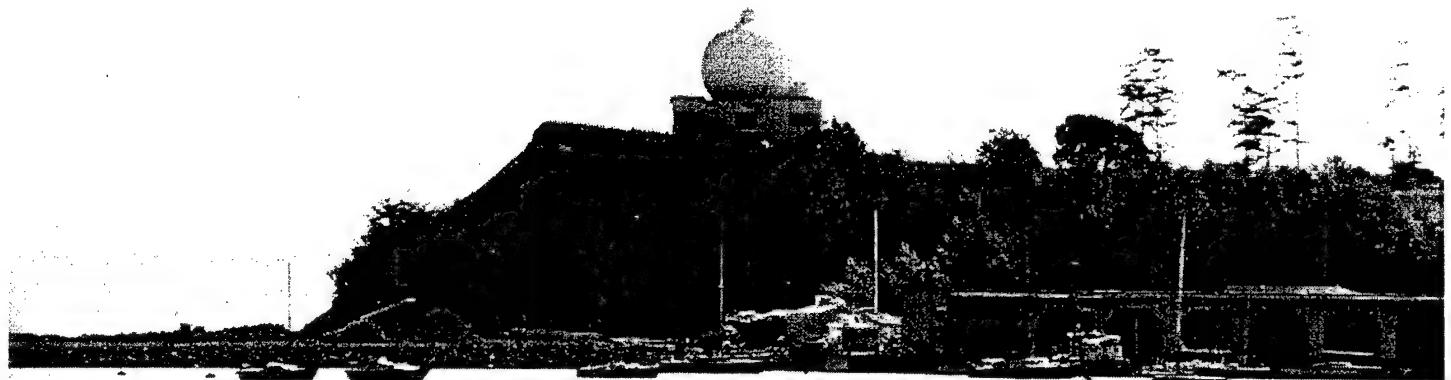
2.2 DESCRIPTION OF ALTERNATIVES IN THE EA

This EA evaluates the Proposed Action, as well as a No Action Alternative as required by NEPA. These two alternatives were selected by the Navy from a total of five potential marina renovation options, plus the No Action Alternative. Based on preliminary evaluation of the five marina renovation options, Option 5 - the Proposed Action - was the only option to meet the Navy's purpose and needs. The Proposed Action and the No Action Alternative are discussed in Section 2.2.1 and 2.2.2 below. An evaluation of the marina renovation options eliminated from detailed analysis is presented in Section 2.3.

2.2.1 Proposed Action

The Proposed Action would renovate the existing MWR Marina at Seaplane Base, demolish the boat house, and relocate boats moored on buoys to the marina. The Proposed Action would provide for: (1) approximately 60 uncovered boat slips at the renovated MWR Marina; (2) demolition of the boat house, except for several piles and a corner deck area; and (3) relocation of 18 moored boats on buoys in Crescent Harbor to the marina (Figures 2.1-4 and 2.1-5). The renovation would consist of a series of new concrete floats in a "C" configuration. These concrete floats would be attached to existing or reused piles. Approximately 26 new finger floats would be attached to the main floats to create double slips. Approximately 55 slips would be provided to accommodate various MWR power boats and sail boats used for rentals, boats owned by active-duty military personnel, dependents, military retirees, DoD civilians, and Sea Scout boats. The marina would also service approximately five Navy boats from various departments. Demolition of the boat house would occur during 1997 with renovation of the marina occurring over a 5-year period from 1998 to 2002. Water and electrical service at the marina would be expanded to the new boat slips from existing utility lines at the boat





View looking south at the existing boat house (Building 19), marina, and moored boats on buoys in Crescent Harbor . A Navy fuel pier is located to the left and an Electronic Combat Training (ECT) facility is located on a promontory behind the marina.

Provided by: EDAW, Inc. 1996

Environmental Assessment
for MWR Marina Renovation
Seaplane Base, NASWI

**Existing View - Marina, Building 19,
and Moored Boats on Buoys**

house. No dredging would be required for construction. No in-water fueling, in-water sewage disposal, and major in-water boat maintenance would occur during operation of the marina. Approximately 82 piles would be removed during demolition of the boat house (Figure 2.1-6) and approximately 18 reused or new piles would be installed within the same area. Adjacent marine railway piles next to the boat house would be removed (Figure 2.1-7).

2.2.2 No Action Alternative

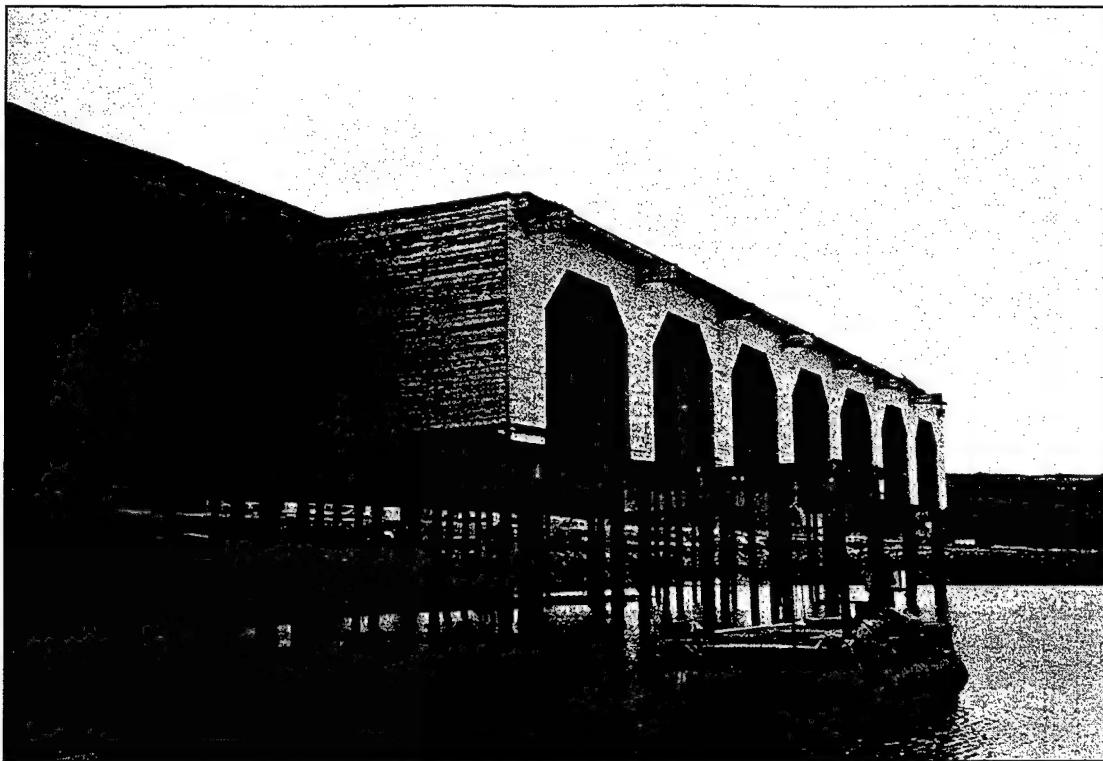
As required by NEPA, the No Action Alternative is considered in this EA. The No Action Alternative would not implement the Proposed Action at Seaplane Base and would not satisfy current or future Navy needs. The No Action Alternative would result in: (1) no removal of the existing hazards associated with the boat house, (2) no creation of a safe marina at Seaplane Base with restored in-water boat slip capacity following the closure of the boat house, (3) no expansion of the existing marina capacity to help meet MWR marina user needs in the region, (4) no provision for additional operating revenue for the marina or other MWR programs at NASWI, and (5) no removal of 18 moored boats on buoys in Crescent Harbor. Additionally, completion of a HABS and development of a public interpretive display may not possibly occur. The building would continue to deteriorate creating a continuing hazard, and the historic aspects of the boat house would not be archived at this time.

2.3 RENOVATION OPTIONS CONSIDERED IN THE EA

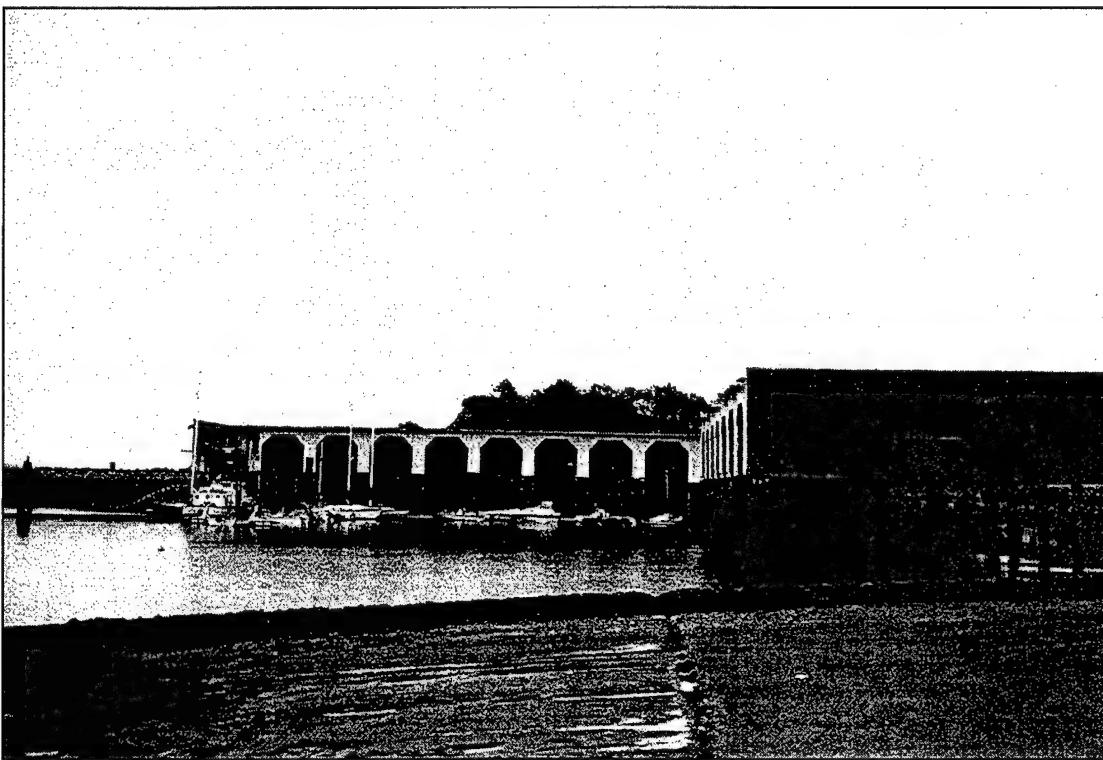
In response to the closure of the MWR Marina boat house in 1993 and the need for continued and expanded pleasure boat rental moorage at the MWR Marina, the Navy commissioned an engineering feasibility study to assess various options for renovation. In this initial study, *Marina Demolition/Renovation: Feasibility Analysis Concept-Level Cost Certifications 100% Submittal* (ABAM Engineers 1994), four options were evaluated including: (1) partial demolition, (2) complete demolition, (3) rehabilitation of existing boat house, and (4) renovation and modification. These options considered different design and engineering solutions to historical resource concerns, possible full or partial reuse of the boat house, and different boat slip configurations using existing or new piles.

Following review of this initial engineering report by the Navy, a fifth option was developed that includes the Proposed Action. These five options are described below and are assessed in Section 2.3.2 using evaluation criteria identified in Section 2.3.1.

Option 1: Partial Demolition With 22 Slips Provided - This option would retain, in its present condition, the southwest corner of the boat house in an "L"-shaped configuration but smaller than the current superstructure. Approximately 22 long boat slips would be provided under this option, excluding the EOD float for transient use. New pedestrian



View looking west from the boat house (Building 19) and marina.

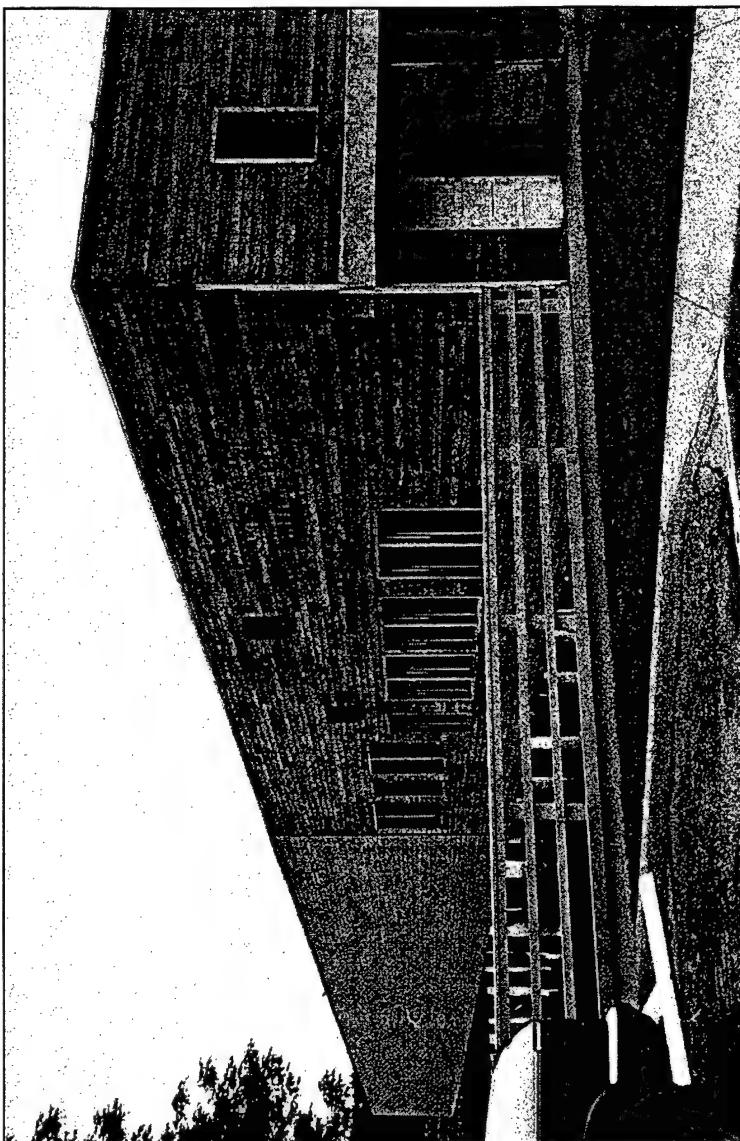


View looking south at the boat house (Building 19) and marina from the Seaplane Base ramps.

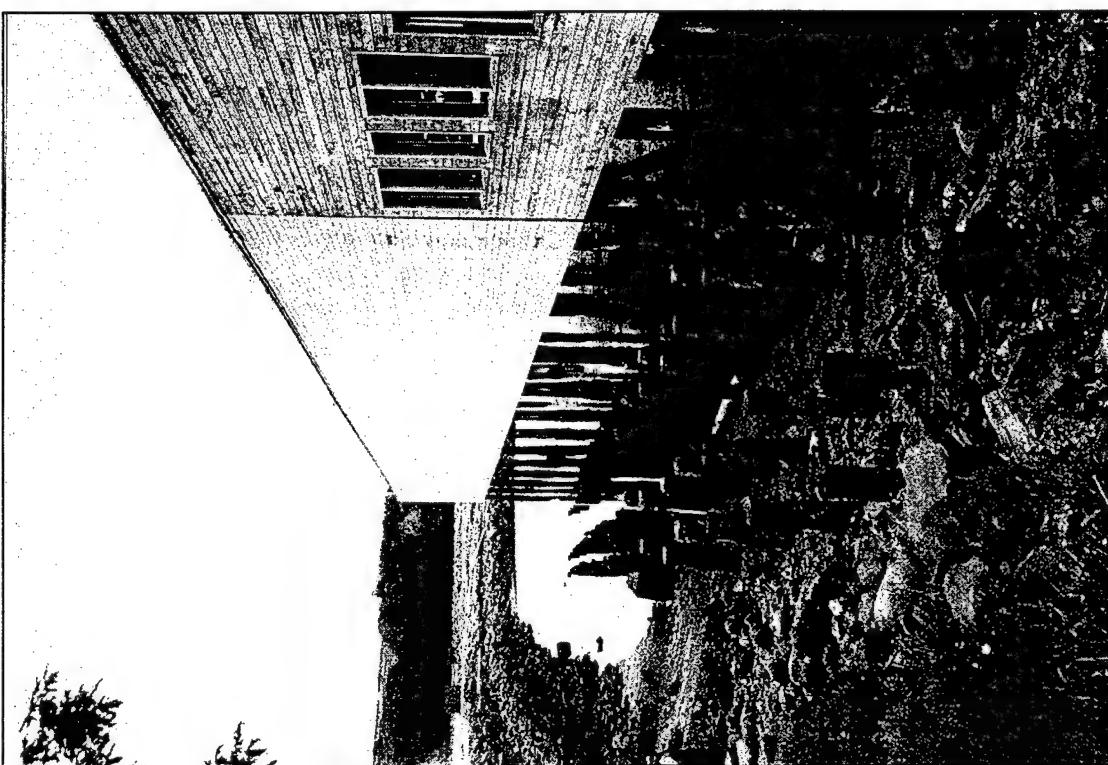
Provided by: EDAW, Inc. 1996

Environmental Assessment
for MWR Marina Renovation
Seaplane Base, NASWI

**Existing Views - Marina
and Building 19**



View looking north at the shoreline riprap rock, boat house (Building 19), and marine railway piles at low tide.



Provided by: EDAW, Inc. 1996

Environmental Assessment
for MWR Marina Renovation
Seaplane Base, NASWI

**Existing Views - Marine Railway Piles
and Building 19**

Figure 2.1-7

access brows and floats would be provided to access the boat slips between remaining piles. This option would not relocate 18 moored boats currently on buoys in Crescent Harbor. No effort would be made to rehabilitate the remaining structure other than the replacement of deteriorated perimeter piles in the areas of demolished roof structures. Demolition would consist of removing the roof structure from the north and east portions of the boat house. Existing 4-inch by 6-inch (10.2-cm by 15.2-cm) wooden line girts, or wooden cross supports, would remain. These supports would connect the remaining piles parallel to the boat slips and would provide lateral support after the roof is removed. The purpose of removing the roof system would be to eliminate the danger of falling debris so that the existing piles can be used as support for new floats. The existing marine railway piles, used to support a former rail line to the boat house, and the existing riprap rock along the shoreline would remain. A continuing maintenance cost item would be preserving the remaining corner structure of the boat house in its present condition. No HABS would be conducted at this time and the interpretive display may not be provided. The estimated cost of Option 1 is approximately \$300,000, the lowest of the five options.

Option 2: Complete Demolition With No Slips Provided - This option would demolish the entire boat house and preserve the historic aspects of the structures in archives only. No boat slips would be provided. Option 2 would not relocate 18 moored boats currently on buoys in Crescent Harbor. The existing marine railway piles would be removed and existing riprap rock would remain. The interpretive display may not be provided. The estimated cost of Option 2 is approximately \$658,000, the second lowest of the five options.

Option 3: Rehabilitate Existing Boat House With 22 Slips Provided - This option would rehabilitate the existing boat house without modifying its overall configuration. Approximately 22 long boat slips would be provided under this option, excluding the EOD float for transient use. Option 3 would not relocate 18 moored boats currently on buoys in Crescent Harbor. To restore the facility, deteriorated structural components and built-up roof members would be replaced, and new custom-made floats would be installed. The existing corner office area would be rehabilitated inside and utility and appliance services restored. The boat slips would contain new concrete floats and new water and electrical service at each slip. New lighting and wet and dry fire protection services would be provided. This option would not completely rehabilitate the structure but would provide safe operation with limited amenities. The corner interior uses would include MWR office space, laundry area, and locker and shower rooms. Approximately 14 piles would be replaced to make the corner structure safe, some needing to be driven through the roof. Custom-made floats would need to be provided since the structure configuration is non-standard. Dredging would be required adjacent to the bulkhead to remove sloughed material. The existing marine railway piles and riprap rock would remain. Previous problems with vessel congestion due to narrow, long slips would continue. Additionally, vertical clearance limitations due to the roof structure would continue. No HABS would be conducted at this time and the interpretive display may not be provided. The estimated cost of Option 3 is approximately \$1,445,000, the second highest of the five options.

Option 4: Renovation and Modification With 38 Slips Provided - This option would include partial demolition of the covered slips, rehabilitation of the remaining structure, dredging, and the addition of new concrete piles and floats for the reconfigured marina. Approximately 38 boat slips would be provided under this option, excluding the EOD float for transient use, with 11 of the 38 slips to be provided in the future. Option 4 would not relocate 18 moored boats currently on buoys in Crescent Harbor. The building would receive a new roof, new siding, and new utility services. The float system would be made of 6-foot-wide (1.8 m) marginal walkways and 3-foot-wide (0.9 m) finger floats in the open slip area. Slips would be provided in a double-slip configuration. The remaining portion of the boat house would be renovated and would have new 5-foot-wide (1.5 m) special floats anchored to existing piles. Existing piles to be removed would be disposed of at an approved landfill and would not be reused. The old marine railway piles would be pulled and the existing riprap rock would remain. The corner office area would be refurbished and fire protection services would be enhanced, as in Option 3. A new boat fueling station and a sewage dump station would be provided at the east side of the facility. Upland fuel and holding tanks would be added. Dredging would occur, as in Option 3. Option 4 would provide a configuration more consistent with modern-day marinas; however, it would not include provision for boat lifts or boat repairs. A portion of the structure would be retained for historic preservation purposes; however, these covered slips restrict the vertical clearance of boat masts and superstructures. No HABS would be conducted at this time and the interpretive display may not be provided. The estimated cost of Option 4 is approximately \$1,733,000, the highest of the five options.

Option 5: Demolition and Renovation With 60 Slips Provided (Proposed Action) - This option would demolish and renovate the existing marina and boat house and would provide approximately 60 uncovered boat slips at full build out. Approximately 55 slips would be provided to accommodate various MWR-related needs. Additional slips would house approximately five Navy boats from various departments. Approximately 18 moored boats currently on buoys in Crescent Harbor would be relocated to the marina. The boat house would be mostly demolished, except for several piles that would be reused to anchor new concrete floats. Water and electrical service at the marina would be expanded to the new boat slips from existing utility lines at the boat house. No dredging would be required. No in-water fueling, in-water sewage disposal, or major in-water boat maintenance would occur at the marina. Approximately 82 piles would be removed during demolition and 18 reused or new piles would be installed within the same area. The existing marine railway piles would be removed and the existing riprap rock would remain. The Navy would conduct a HABS and would prepare an interpretive display at or near the boat house. The estimated cost of demolishing the boat house and renovating the marina (Option 5) is \$900,000, the third lowest of the five options.

2.3.1 Evaluation Criteria

Seven evaluation criteria were used in this EA to assess the five marina renovation options. The criteria were developed following development of the initial four options in

the feasibility study (ABAM Engineers 1994). Therefore, the four initial options may not meet, or may only partially meet, the seven criteria described in this section. The seven criteria are based primarily on the Navy's current purpose and needs and include two types: exclusionary and evaluative. Exclusionary criteria must be met for a marina renovation option to be considered as an alternative in this EA. Evaluation criteria for the marina renovation options may be used to exclude options from full analysis in this EA if several evaluative criteria are not met. Two exclusionary criteria and five evaluative criteria are described below:

Exclusionary Criteria

- Remove building safety hazards at the boat house including structural failures, falling roof and siding debris, and lead-based paint. Asbestos-containing materials have already been removed.
- Create a safe MWR Marina at Seaplane Base restoring the previous boat slip capacity of 25 to 35 in-water boat slips that existed prior to the closure of the boat house.

Evaluative Criteria

- Expand the MWR Marina capacity to meet the demand for additional boat slips by providing 25 to 35 additional boat slips (60 boat slips total) to help meet increased demand for pleasure boat moorage in the northern Puget Sound area.
- Provide additional operating revenue for the marina and for other MWR programs at NASWI by increasing the quality and total number of boat slips at the MWR Marina.
- Eliminate 18 moored boats on buoys in Crescent Harbor by relocating them to a more protected area, such as the marina.
- Provide a cost-effective solution to the Navy's MWR Marina needs because of limited funding for this Navy project.
- Minimize environmental effects, including dredging or pile driving/removal.

2.3.2 Evaluation of Renovation Options

The five marina renovation options were evaluated using the two exclusionary and five evaluative criteria previously described. The results of this evaluation are summarized in Table 2.3-1. Evaluation responses include "yes," "partial," and "no." Summary results of the evaluation of each marina renovation option are presented below.

Table 2.3-1. Evaluation of Marina Renovation Options at Seaplane Base, NASWI.

MARINA OPTIONS CONSIDERED	Exclusionary:		Evaluate:		Evaluate:	
	Create a Safe MWR Marina With the Previous Capacity (25-35 slips)	Expand Capacity to Meet Demand for Additional Marina Facilities (up to 60 Slips)	Provide Additional Operating Revenue for the Marina and Other MWR Programs	Eliminate Moored Boats on Buoys in the Harbor by Relocating Boats to the Marina	Provide for a Cost Effective Solution to MWR Marina Needs	Minimize Impacts With No Dredging, Unnecessary Pile Constr.
1. Partial Demolition with 22 Slips Provided	Partial	No	No	No	Partial	Partial
2. Complete Demolition with No Slips Provided	Yes	No	No	No	No	Partial
3. Rehabilitate Existing Boat House with 22 Slips Provided	Yes	No	No	No	No	No
4. Renovation and Modification with 38 Slips Provided	Yes	Yes	Partial	Partial	No	No
5. Demolition and Renovation with 60 Slips Provided	Yes	Yes	Yes	Yes	Yes	Yes

Yes = Option meets the intent of the criterion; **Partial** = Option partially meets the intent of the criterion; **No** = Option does not meet the intent of the criterion.
Source: provided by EDAW, Inc. 1996; and meeting with NASWI Environmental Affairs Dept. and MWRF Department, 6 May 1996.

- Option 1: Partial Demolition - This option would partially remove the existing hazards at the boat house, but would leave the corner portion of the boat house unchanged and unrepaired. The remaining portion of the boat house would still be a hazard. While fulfilling an initial desire by the Navy to retain a portion of the boat house for historical reasons, the design of Option 1 does little to enhance the facility's usefulness as a functional marina. The original number of boat slips prior to the closure of the boat house would not be replaced and additional slips to accommodate expansion would not be provided. Operating revenues would be below past levels due to fewer boat slips available for rent. Boats in Crescent Harbor on buoys would not be relocated to the marina. The cost of this option is the lowest of the five options; however, maintenance of the remaining portion of the boat house would continue. Too few boat slips would be provided to meet the Navy's needs. No dredging would occur under this option. However, some piles either would be removed or left in a configuration that is inefficient for the operation of a modern-day marina. In summary, Option 1 does not meet all of the Navy's exclusionary criteria and only partially meets two of the evaluative criteria (see Table 2.3-1). Therefore, Option 1 does not meet the Navy's purpose and needs and was dropped from full consideration as a NEPA alternative in this EA.
- Option 2: Complete Demolition - This option would completely demolish the boat house, thereby removing the existing hazards. No portion of the building or piles would remain. The benefits of this alternative would be: (1) the elimination of any future maintenance costs since the boat house would be completely removed, (2) removal of boat house shadowing of the subtidal zone, and (3) removal of creosote piles within the marine environment. This is the second lowest cost option and is low compared to Options 3 through 5; however, no new facilities would be provided to meet the Navy's needs. The original number of boat slips prior to the closure of the boat house would not be replaced and no additional slips to accommodate expansion would be provided. There would be no operating revenues since the entire facility would be demolished. Boats in Crescent Harbor on buoys would not be relocated to the marina. No dredging would occur under this option, but all piles would be removed thereby eliminating the option of securing new floats to these piles sometime in the future. In summary, Option 2 does not meet all of the Navy's exclusionary criteria and only partially meets one of the evaluative criterion (see Table 2.3-1). Therefore, Option 2 does not meet the Navy's purpose and needs and was dropped from full consideration as a NEPA alternative in this EA.
- Option 3: Rehabilitation of Existing Boat House - This option would remove the existing safety hazards at the boat house and rehabilitate the corner office space. Option 3 would not completely rehabilitate the structure but would make it safe to inhabit and would provide limited amenities. The original number of boat slips prior to the closure of the boat house would not be replaced and additional slips to accommodate expansion would not be provided. Operating revenues would be below past levels due to fewer boat slips available for rental. Boats in Crescent Harbor on buoys would not be relocated to the marina. The cost of rehabilitating the boat house

in its current configuration (Option 3) is the second highest cost option of the five options considered. Too few boat slips would be provided to meet the Navy's needs. Dredging would occur under this option. Some piles would either be removed or left in a configuration that is inefficient for the operation of a modern-day marina. In summary, Option 3 does not meet all of the Navy's exclusionary criteria and meets none of the evaluative criteria (see Table 2.3-1). Therefore, Option 3 does not meet the Navy's purpose and needs and was dropped from full consideration as a NEPA alternative in this EA.

- Option 4: Renovation and Modification - This option would remove the existing safety hazards at the boat house and rehabilitate and expand the use of the corner interior space to include improved amenities. The original number of boat slips prior to the closure of the boat house would be replaced and a few additional slips to accommodate expansion would be provided. Operating revenues would exceed past levels due to additional boat slips but would not likely reach the level of the Proposed Action (Option 5). Boats in Crescent Harbor on buoys would not likely be relocated to the marina since too few additional slips would be provided. The cost of renovating and modifying the boat house (Option 4) is the highest of the five options considered. Too few boat slips would be provided to meet the Navy's needs. Dredging would occur under this option. In comparison to Option 3, fewer piles would be left in a configuration that is inefficient for the operation of a modern-day marina. In summary, Option 4 does meet all exclusionary criteria. However, Option 4 only partially meets two of the evaluative criteria and does not meet three additional ones (see Table 2.3-1). Therefore, Option 3 does not meet the Navy's purpose and needs and was dropped from full consideration as a NEPA alternative in this EA.
- Option 5: Demolition and Renovation (Proposed Action) - This option would remove all building hazards at the boat house. The corner office space would not be renovated because this use has already been accommodated by the Navy within nearby Building 2735. The original number of boat slips prior to the closure of the boat house would be replaced. Additional boat slips would be provided to help meet the demand for pleasure boat moorage in northern Puget Sound. Option 5 would provide the largest number (60) of boat slips. Operating revenues would exceed past levels (due to 60 boat slips) and would be the highest of the five options considered. Boats in Crescent Harbor on buoys would be relocated to the marina. The cost of Option 5 is in the middle of a range of costs between Options 1 and 2 on the low end, and Options 3 and 4 on the high end. Dredging would not be required. Piles would be removed and/or reinstalled in a configuration that would allow for the efficient use of the marina to accommodate modern-day boats. A HABS and an interpretive display would document the historic aspects of the boat house. In summary, Option 5 meets all of the Navy's exclusionary and evaluative criteria (see Table 2.3-1) and the Navy's purpose and needs. Therefore, it is included for full consideration as a NEPA alternative in this EA.

2.4 SUMMARY OF ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES

This section summarizes the environmental effects and mitigation measures of the Proposed Action and the No Action Alternative. These effects and mitigation measures are summarized in Table 2.4-1 below. Mitigation measures are listed in detail in Section 2.4.1. The information presented in this section is based on the full analysis presented in Section 3.0.

2.4.1 Listing of Mitigation Measures – Proposed Action

This section lists the mitigation measures to be implemented if the Proposed Action is selected. Some of these measures are required to minimize adverse effects to below a level of significance. These measures are listed by resource topic and alpha-numeric designation below.

Land and Shoreline Use

- LSU-1 The Navy will acquire a Coastal Zone Consistency Determination in compliance with the Washington Coastal Zone Management Plan (CZMP).

Climate and Air Quality

- CAQ-1 The Navy will develop and implement appropriate fugitive dust control measures to be used during construction. These measures will reduce the emission of particulates, including during non-working periods, and will include the use of dust suppressants (e.g., site watering during dry periods) and street sweeping. These measures can likely reduce on-site particulate emissions and will ensure compliance with Section 550 of Northwest Air Pollution Authority (NWAPA) regulations (NWAPA 1993).

Geology, Soils, and Sediment

- GSS-1 The Navy contractor will implement Best Management Practices (BMPs), as defined by Washington Department of Ecology (WDOE) and Island County, to minimize erosion during demolition and renovation.
- GSS-2 The Navy contractor will use BMPs during building demolition to ensure that construction debris, including lead-based paint chips, do not enter the water or contaminate marine sediments.

Table 2.4-1. Summary of Environmental Effects and Mitigation Measures for the Proposed Action and the No Action Alternative.

AFFECTED ENVIRONMENT	PROPOSED ACTION	NO ACTION ALTERNATIVE
Land and Shoreline Use		
<i>Environmental Effects</i>	No significant effects are anticipated. Air Installation Compatible Use Zone (AICUZ), Base Exterior Architecture Plan (BEAP), and Master Plan requirements would be met. Project would be compatible with existing shoreline uses. A Coastal Zone Consistency Determination is needed.	Would not implement the recommendations of the BEAP and Master Plan.
<i>Mitigation Measures</i>	LSU-1 (see Section 3.1.3)	None required.
Climate and Air Quality		
<i>Environmental Effects</i>	No significant effects. Some small increase in emissions caused by construction vehicles and equipment and a potential for fugitive dust during construction. Minor increase in boat combustion engine emissions.	No effects.
<i>Mitigation Measures</i>	CAQ-1 (see Section 3.2.3).	None required.
Geology, Soils, and Sediment		
<i>Environmental Effects</i>	Short-term negative effects on marine sediments in the immediate vicinity of the piles being removed or installed. Some potential settling of lead-based paint chips and other materials into the marine sediments near the boat house. No increase in impervious surface.	Possible settling of lead-based paint chips in the marine sediments near the boat house.
<i>Mitigation Measures</i>	GSS-1, GSS-2, GSS-3, and GSS-4 (see Section 3.3.3)	None required.

Table 2.4-1. Summary of Environmental Effects and Mitigation Measures for the Proposed Action and the No Action Alternative (Cont'd.).

AFFECTED ENVIRONMENT	PROPOSED ACTION	NO ACTION ALTERNATIVE
Hydrology and Water Quality		
Environmental Effects	Short-term negative effects on water quality in the immediate vicinity of the piles being removed or installed. Operation of the MWR Marina would increase the number of boats that could leak or spill fuel or oil. Elimination of mooring buoys would decrease the risk of boats washing on shore and leaking hazardous substances.	Continued deterioration of the boat house would likely cause lead-based paint chips and other substances to fall into the water and settle into marine sediments over a period of time. Would forego the benefit of eliminating mooring buoys from Crescent Harbor.
Mitigation Measures	GSS-1, GSS-2, GSS-3, and GSS-4 (see Section 3.3.3)	None required.
Cultural Resources		
Environmental Effects	Demolition of the boat house would cause an adverse effect on the historical resource potentially eligible for inclusion in the NRHP. Unlikely to affect archeological resources.	Loss of the boat house over the long term due to continued deterioration. HABS documentation and interpretation may occur, but not at this time.
Mitigation Measures	CR-1, CR-2, and CR-3 (see Section 3.5.3).	None required.
Wildlife and Fishery Resources		
Environmental Effects	Short-term disturbance to fish and wildlife and localized water quality effects during construction. Removal of cliff swallow nesting habitat in the boat house and pile substrate for marine invertebrates. Improved light penetration following boat house removal would increase marine aquatic productivity at the site.	Continued potential water contamination from lead-based paint chips and other materials falling from the boat house; structural shading of the water, which reduces biological productivity.
Mitigation Measures	WFR-1, WFR-2, WFR-3, and WFR-4 (see Section 3.6.3); and GSS-1 through GSS-4 (see Section 3.3.3).	None required.

Table 2.4-1. Summary of Environmental Effects and Mitigation Measures for the Proposed Action and the No Action Alternative (Cont'd.).

AFFECTED ENVIRONMENT	PROPOSED ACTION	NO ACTION ALTERNATIVE
Noise		
Environmental Effects	Short-term increased noise levels near the MWR Marina during construction, but no effects to any residential areas.	No effects.
Mitigation Measures	N-1 (see Section 3.7.3).	None required.
Environmental Justice		
Environmental Effects	No effects anticipated. Compliance with Executive Order.	No effects.
Mitigation Measures	EJ-1 (see Section 3.8.3).	None required.
Aesthetics and Visual Quality		
Environmental Effects	Short-term negative effects due to presence of construction equipment, but overall beneficial effects due to removal of the deteriorating boat house.	Continuing worsening aesthetics as boat house deteriorates.
Mitigation Measures	None required.	None required.
Traffic and Circulation		
Environmental Effects	No significant effects. Some construction traffic and small increase in marina user traffic would occur on Coral Sea Ave. and Tulage Ave.	No significant effects.
Mitigation Measures	None required.	None required.
Vegetation		
Environmental Effects	No effects to native vegetation. Only landscaped lawn vegetation may be affected.	No effects to native vegetation.
Mitigation Measures	None required.	None required.

Table 2.4-1. Summary of Environmental Effects and Mitigation Measures for the Proposed Action and the No Action Alternative (Cont'd.).

AFFECTED ENVIRONMENT	PROPOSED ACTION	NO ACTION ALTERNATIVE
Wetlands		
<i>Environmental Effects</i>	No effects to wetlands. Wetlands are not present at site.	No effects to wetlands. Wetlands are not present at site.
<i>Mitigation Measures</i>	None required.	None required.
Recreation		
<i>Environmental Effects</i>	Effects would be positive. Facility would increase recreational boat moorage space by over 100 percent of current levels and would increase MWR revenue for other NASWI recreation programs.	The beneficial effects of increased moorage and MWR revenue would not be realized.
<i>Mitigation Measures</i>	None required.	None required.
Socioeconomics		
<i>Environmental Effects</i>	Effects would be positive. Facility construction would result in short-term work for approximately 15 workers. There would be no significant change in MWR Marina staffing levels.	The beneficial effects of short-term construction jobs would not be realized.
<i>Mitigation Measures</i>	None required.	None required.
Housing		
<i>Environmental Effects</i>	No effects.	No effects.
<i>Mitigation Measures</i>	None required.	None required.
Public Services		
<i>Environmental Effects</i>	No significant effects are anticipated. All law enforcement and emergency services would be provided by DoD facilities.	No effects.
<i>Mitigation Measures</i>	None required.	None required.

Table 2.4-1. Summary of Environmental Effects and Mitigation Measures for the Proposed Action and the No Action Alternative (Cont'd.).

AFFECTED ENVIRONMENT	PROPOSED ACTION	NO ACTION ALTERNATIVE
Schools		
<i>Environmental Effects</i>	No effects	No effects
<i>Mitigation Measures</i>	None required.	None required.
Utilities		
<i>Environmental Effects</i>	On-site extension of electrical and water service would be required. All existing services have adequate capacity to accommodate utility service extension.	No effects.
<i>Mitigation Measures</i>	None required.	None required.

- GSS-3 The Navy contractor will minimize the risk of soil contamination during construction by restricting fueling and equipment maintenance to a designated staging area with an impermeable surface and a spill containment and clean-up kit.
- GSS-4 The Navy will obtain authorization for pile removal and installation from the COE, pursuant to Section 10 of the Rivers and Harbors Act, and will process a Joint Aquatic Resources Permit Application (JARPA) with applicable agencies.

Hydrology and Water Quality

Measures GSS-1 through GSS-4 will address water quality issues.

Cultural Resources

- CR-1 The Navy will halt construction and consult with the SHPO if an unanticipated discovery of archeological resources should occur during construction to determine the potential significance of the resources and to identify appropriate mitigation measures, if any.
- CR-2 The Navy will complete the stipulations of the MOA between the Navy and SHPO, including preparation of a HABS report on the boat house and the construction of an interpretive display of the boat house.

- CR-3 The Navy will ensure that removal of the monorail between the boat house and Building 81 is completed in a manner that does not harm or alter Building 81.

Wildlife and Fishery Resources

- WFR-1 The Navy will conduct major demolition work, heavy-equipment construction, and pile driving activities only during the allowable construction period (outside of the period from January 15 to August 15) to minimize disturbance to bald eagles during the nesting and wintering period. During construction activities, the Navy will continue to observe eagles at the Seaplane Base as described in the NASWI Draft Bald Eagle Management Plan (EDAW 1996).
- WFR-2 The Navy will schedule in-water construction activities to avoid the March 15 to June 15 mitigation window to eliminate potential effects to juvenile anadromous fish migrating from fresh to saltwater.
- WFR-3 The Navy will mitigate potential adverse effects to the marine environment by providing for a net decrease of approximately 64 creosote-treated timber piles. Removal of old, preservative-laden timber piles is viewed as a positive effect on the local marine environment.
- WFR-4 The Navy will comply with agency consultation and permitting requirements including: (1) Washington State Hydraulic Project Approval to mitigate for potential adverse effects to water quality and fish habitat; (2) COE permitting; and (3) informal consultation with U.S. Fish and Wildlife Service (USFWS), Washington Department of Fish and Wildlife (WDFW), National Marine Fisheries Service (NMFS).

Noise

- N-1 The Navy will minimize noise emissions during construction in compliance with Navy Environmental and Natural Resources Manual (OPNAVINST 5090.1B [Department of the Navy 1994]) that requires maximum use of low noise emission products, as certified by U.S. Environmental Protection Agency (EPA), for all Navy-related operations; as well as compliance with other Federal and State regulations pertaining to construction-related noise generation. Measures to reduce construction noise will include: (1) limiting construction activities to normal daytime periods between 7 a.m. and 7 p.m. Monday through Saturday, (2) using equipment with proper mufflers or noise control devices, and (3) situating noise-generating equipment near construction activities only.

Environmental Justice

- EJ-1 The Navy will distribute the EA in compliance with the President's Executive Order 12898 and NEPA to the Swinomish and Samish Tribes to ensure that

these minority groups receive adequate information concerning the Proposed Action. Requests from any minority or ethnic groups or organizations for information and/or copies of this EA will be met in a timely manner by the Navy.

Other Resource Topics With No Mitigation Required

No adverse effects were identified for the Proposed Action for the following resource topics: aesthetics/visual quality, traffic and circulation, vegetation, wetlands, recreation, socioeconomics, housing, public services, schools, and utilities. Therefore, no mitigation measures are necessary to protect these resources.

2.5 FONSI OR EIS RECOMMENDATION

A finding of No Significant Impact (FONSI) is recommended for the Proposed Action. An Environmental Impact Statement (EIS) is not recommended. Maintaining a FONSI determination under NEPA requires implementation of mitigation measures as identified in the previous section (Section 2.4.1) to eliminate or reduce effects to insignificant levels.

3.0 AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND MITIGATION MEASURES

Section 3.0 discusses the affected environment, environmental consequences, and proposed mitigation measures for effects associated with alternatives under consideration in this EA, by resource area. Potential effects were analyzed for both the Proposed Action (demolition of the boat house [Building 19] and renovation of the MWR Marina at the Seaplane Base) and the No Action Alternative. Each resource topic is discussed separately below. Environmental resource topics found to have no or minor to negligible effects are discussed at the end of this section and include: aesthetics/visual quality, traffic and circulation, vegetation, wetlands, recreation, socioeconomic, housing, public services, schools, and utilities.

3.1 LAND AND SHORELINE USE

3.1.1 Affected Environment

The project site is located in Township 32 N, Range 1 E, Section 1 within Island County. The Navy owns the MWR Marina property, including the tidelands, and has grant deed rights to minus 4 fathoms below mean low tide. This equates to approximately -21.2 feet (-6.46 m) (letter from DNR 1996). Bathymetry data in the area indicate that this depth is farther out in the harbor than the MWR Marina (USGS 1980). The MWR Marina is situated on Crescent Harbor on the east side of the 1,700-foot (518-m) wide isthmus separating Oak Harbor to the west and Crescent Harbor to the east. The portion of the Seaplane Base surrounding the MWR Marina is heavily developed consisting of the MWR Marina and boat house, main pier, Navy Exchange, Commissary, EOD facility, large paved areas, boat ramps, and parking lots (Figure 2.1-3). The MWR Marina is currently used for rental moorage of pleasure boats for active-duty military personnel, dependents, military retirees, and DoD civilians; the public is not authorized to use the facility. The MWR Marina also houses a few small Navy boats from various departments.

The portion of the Seaplane Base surrounding the MWR Marina is heavily developed, with the existing MWR Marina and boat house, main pier, Navy Exchange, Commissary, EOD facility, large paved areas, boat ramps, and parking lots (Figure 2.1-3). The hillside to the south of the MWR Marina area is composed of shrubs and landscaped lawn. The electronic combat training (ECT) facility is located on the coastline bluff and is a prominent visual feature because of its large radome atop a two-story structure. Only a few trees exist in the immediate area; the nearest forested stand is 0.3 mile (0.5 km) to the southwest. Military housing complexes are located to the south and northwest of the MWR Marina (Figure 2.1-2).

A Base Exterior Architecture Plan (BEAP), originally developed for NASWI in 1983 and included as part of the NASWI Master Plan (Proposed Land and Facility Use), calls for improvements to the MWR Marina (Department of the Navy 1983). Specifically, the BEAP identifies visual improvements for the area directly adjacent to the boat house, removal of the boat house, and MWR Marina expansion.

According to the NASWI Master Plan, the Navy's existing designated land use in the MWR Marina area is Recreation, Community Support (RC) (Department of the Navy 1988), as presented in Figure 3.1-1. To the west of the MWR Marina is an area designated as Training (TR), which is used by the EOD Department. South and east of the MWR Marina is an area designated as Public Works, Supply (PS), with numerous buildings and parking areas. The future planned uses in the vicinity of the MWR Marina are anticipated to remain mostly unchanged from the existing uses (Department of the Navy 1988). The area immediately surrounding the project site will remain RC, while the training (TR) area just to the west of the boat house is expected to change to RC (Department of the Navy 1988) (Figure 3.1-2).

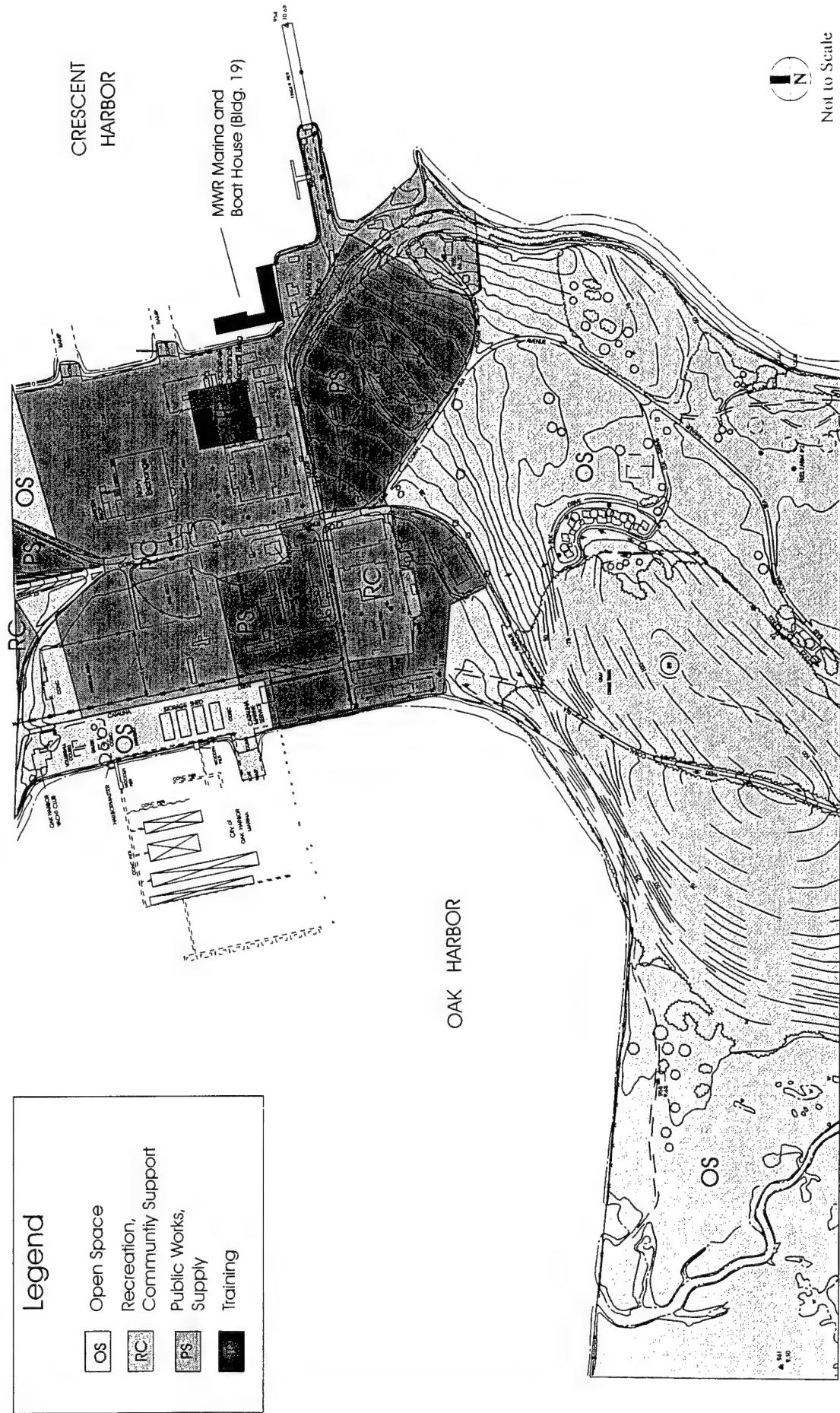
The Ault Field and Coupeville OLF Air Installation Compatible Use Zones (AICUZ) Study Update indicates that the project site is outside of Navy aircraft noise and hazard zones (Department of the Navy 1986). The Navy prepared the AICUZ Study to identify existing and potential problem areas and to formulate courses of action to promote compatible development. The project site is approximately 2,500 feet (762 m) from "noise zone 2" and is outside the accident potential zone (Department of the Navy 1988).

The project site and adjacent shoreline along the western side of the isthmus is designated *Conservancy* under Island County's Shoreline Management Master Program (SMMP) (Island County 1992). This designation is defined as a shoreline which permits human activity, while retaining aesthetic, cultural, ecological, historic, and recreational resources. Conditional uses under this designation specifically allow for boat marinas in these areas (Island County 1992).

3.1.2 Environmental Consequences

The Proposed Action proposes continued use of the area as an MWR Marina and would conform with the land use designation, BEAP recommendation in the NASWI Master Plan, and the AICUZ zones (Department of the Navy 1988). Continued use of the site as an MWR Marina would also conform with the Conservancy designation and applicable conditional uses of the Island County SMMP. In accordance with Washington's CZMP, however, a Coastal Zone Consistency Certification is needed.

The City of Oak Harbor has determined that the Proposed Action would not require a Shoreline Substantial Development Permit under 33 USCS 1323. This permit is not required for Federal actions in areas adjacent to Crescent Harbor (letter from City of Oak Harbor 1996).

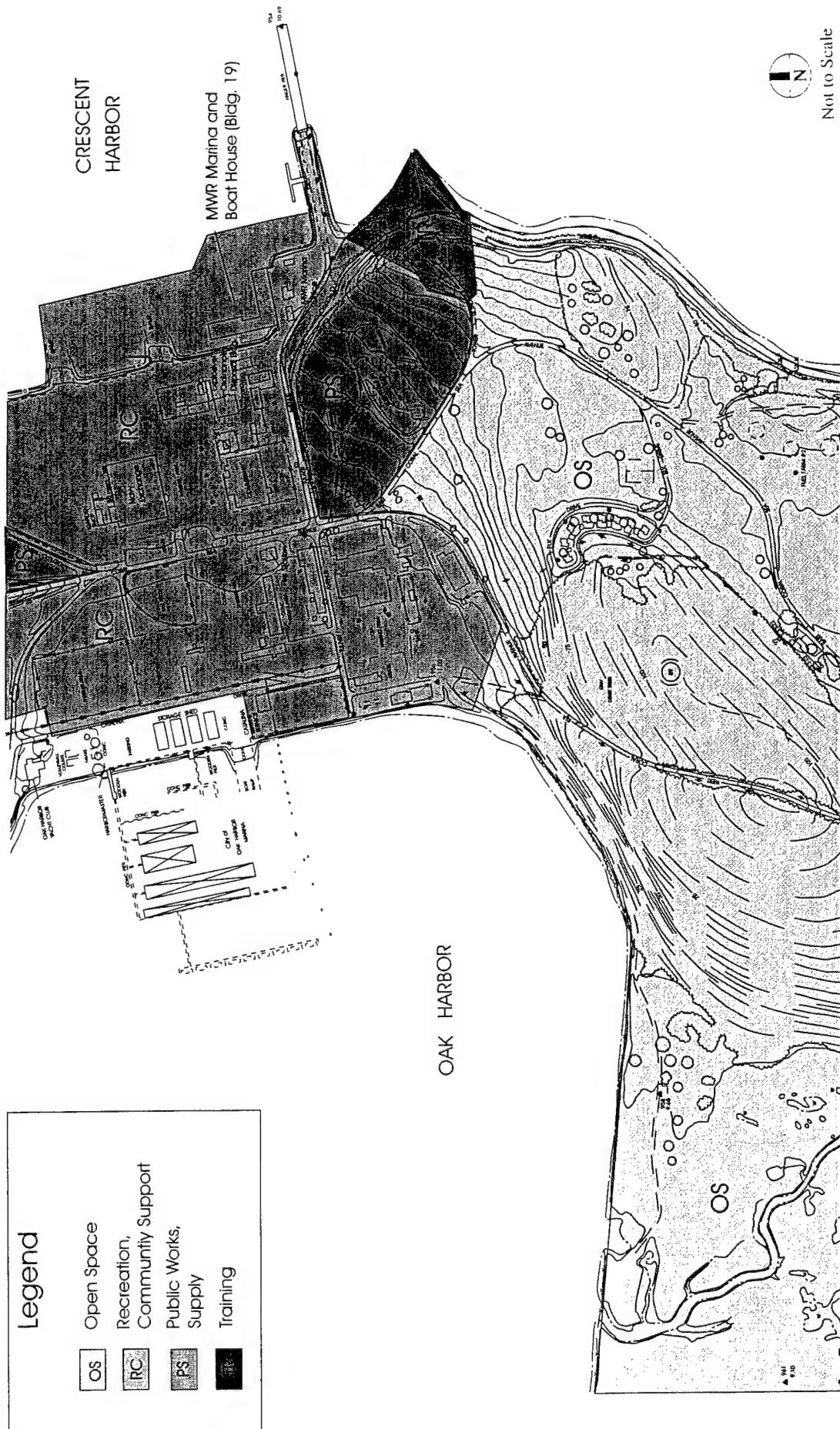


Source: Department of the Navy, 1988

Environmental Assessment
for MWR Marina Renovation
Seaplane Base, NASWI

Land Use - Existing

Figure 3.1-1



Source: Department of the Navy, 1988

Environmental Assessment
for MWR Marina Renovation
Seaplane Base, NASWI

Land Use - Proposed

Figure 3.1-2

The MWR Marina and the Proposed Action occur within Navy-owned lands and a tideland grand deed area. Should it be determined that the Proposed Action occurs within State-Owned Aquatic Lands (SOAL), the Navy would acquire a use authorization document from WDNR.

The No Action Alternative would not implement the recommendation of the NASWI Master Plan or the BEAP related to MWR Marina improvement needs.

No negative effects to land or shoreline uses are expected under the Proposed Action.

3.1.3 Mitigation Measures

To ensure that the Proposed Action is consistent with the Washington CZMP and Island County SMMP, the following mitigation measure will be implemented as part of the Proposed Action.

- LSU-1 The Navy will acquire a Coastal Zone Consistency Determination in compliance with the Washington Coastal Zone Management Plan (CZMP). A Shoreline Substantial Development Permit will be acquired, if needed, to comply with the Washington Shoreline Management Act (SMA) and Island County SMMP.

3.2 CLIMATE AND AIR QUALITY

3.2.1 Affected Environment

Whidbey Island has a uniform marine climate with temperature extremes modified by prevailing westerly winds from the Pacific Ocean. The marine influence is responsible for the relatively mild but distinct wet and dry seasons associated with the area. The mean annual temperature is 47°F (8°C). Average annual precipitation is approximately 20 inches (50 cm) due to the precipitation shadowing effect of the Olympic Mountains. These mountains cause prevailing southeast storms to drop most of their moisture before reaching Whidbey Island. Snowfall is a relatively rare occurrence and usually melts within a day or two.

Spring and summer are characterized by clear, sunny days, with average daily maximum temperatures of 58°F (14°C). Winds are light and variable. In winter, a relatively stationary low pressure region develops in the Aleutian Islands in Alaska. This low pressure region sends storms through Puget Sound and is responsible for overcast, rainy winters with occasional fog. The average daily minimum temperature is 41°F (5°C). The strongest winds occur from the south or southeast during intense Pacific winter storms. Winds may exceed 55 mph (89 kph) once every two years and 80 mph (129 kph) once every 50 years.

The Whidbey Island air basin is considered to be an air quality attainment area and is regulated by the U.S. Environmental Protection Agency (EPA), WDOE, and the Northwest Air Pollution Authority (NWAPA). The NWAPA is the local air pollution control agency serving Island, Skagit, and Whatcom counties. The NWAPA is not required to conduct a new source review for this project because they have jurisdiction only over non-mobile emissions. The EPA has established National Ambient Air Quality Standards (NAAQS) to protect the health and welfare of the public. WDOE has established standards for the State of Washington which, except for more stringent sulfur dioxide limits, parallel the NAAQS. Table 3.2-1 summarizes Federal, State, and local ambient air quality standards.

Table 3.2-1. Ambient Air Quality Standards.

POLLUTANT	NATIONAL		WASHINGTON STATE	PUGET SOUND REGION
	Primary	Secondary		
Carbon Monoxide (CO)				
8-Hour Average	9 ppm		9 ppm	9 ppm
1-Hour Average	35 ppm		35 ppm	35 ppm
Particulate Matter (PM₁₀)				
Annual Arithmetic Average	50 µg/m ³	50 µg/m ³	50 µg/m ³	50 µg/m ³
24-Hour Average	150 µg/m ³	150 µg/m ³	150 µg/m ³	150 µg/m ³
Ozone (O₃)				
1-Hour Average	0.12 ppm	0.12 ppm	0.12 ppm	0.12 ppm
Sulfur Dioxide (SO₂)				
Annual Average	0.03 ppm		0.02 ppm	0.02 ppm
30-Day Average				0.04 ppm
24-Hour Average	0.14 ppm		0.10 ppm	0.10 ppm ^a
3-Hour Average		0.50 ppm		
1-Hour Average ^b			0.25 ppm	0.25 ppm
1 Hour Average			0.40 ppm	0.40 ppm
5-Minute Average ^c				1.00 ppm
Lead (Pb)				
Calendar Quarter Average	1.5 µg/m ³	1.5 µg/m ³	1.5 µg/m ³	1.5 µg/m ³
Nitrogen Dioxide (NO₂)				
Annual Average	0.05 ppm	0.05 ppm	0.05 ppm	0.05 ppm
<i>ppm = parts per million (volumetric) µg/m³ = micrograms per cubic meter</i>				
^a Sulfur dioxide short-term standard never to be exceeded.				
^b Not to be exceeded more than twice in 7 days.				
^c Not to be exceeded more than once in 8 hours.				

Source: 40 CFR 50 (Federal); WAC 173-470 (State); Puget Sound Air Pollution Control Agency (PSAPCA) Regulations, Section 11.01 (local)

Monitoring of ambient air quality on Whidbey Island is limited. NWAPA operated a total suspended particulates (TSP) monitoring station in the City of Oak Harbor, but it was discontinued after documenting several years of low TSP levels. The other NWAPA

air quality monitoring network is associated with an industrial complex near Anacortes. Sulfur dioxide levels there are approximately 30% of the 3-hour, 24-hour, and annual national standards, and about half of the short-term State standards. Because of the low level of sulfur dioxide emitted locally and the distance from Anacortes, sulfur dioxide is not considered by NWAPA to be a problem in the Whidbey Island area. Carbon monoxide, oxides of nitrogen, and ozone are not measured on Whidbey Island. However, the ambient levels of these pollutants are not expected to be of concern. NASWI is the only major source of emissions in the Oak Harbor area. In 1992, NASWI emissions included the following levels of criteria pollutants (letter from NWAPA, 1993):

- 32 tons (32,512 kg) of volatile organic compounds,
- 10 tons (10,160 kg) of particulate matter,
- 61 tons (61,976 kg) of nitrogen oxides,
- 6 tons (6,096 kg) of sulfur dioxides, and
- 21 tons (21,336 kg) of carbon monoxide.

3.2.2 Environmental Consequences

The primary air pollutant emissions from the Proposed Action would be from construction activities, automobile trips associated with construction activities, ongoing operation of the MWR Marina, and increased boat traffic after renovation.

Construction activities would temporarily generate locally elevated levels of pollutants, primarily suspended particulate matter due to the operation of portable generators and compressors that would produce exhaust emissions, use of heavy equipment, pile drivers, and local construction-related traffic. The movement of construction workers and materials to and from the MWR Marina would result in vehicle exhaust emissions and the generation of fugitive dust near the site. However, such activities would be temporary and are not expected to significantly affect air quality.

The primary operational effects to air quality would be air pollutant emissions from vehicles coming to and from the MWR Marina and a small increase in emissions from additional boats. There would be no backup generators at the MWR Marina to cause emissions. This increase in emissions is not expected to significantly affect air quality since the number of additional vehicles (approximately 20 peak period round trips) and boats in the area would be small compared to the over 7,500 daily vehicle trips in the area.

The facility itself would not emit any criteria pollutants.

The No Action Alternative would not affect climate or air quality, as no construction and no new operational activities would occur.

3.2.3 Mitigation Measures

The following mitigation measure will be implemented as part of the Proposed Action to minimize effects to air quality during construction:

- CAQ-1 The Navy will develop and implement appropriate fugitive dust control measures to be used during construction. These measures will reduce the emission of particulates, including during non-working periods, and will include the use of dust suppressants (e.g., site watering during dry periods) and street sweeping. These measures can likely reduce on-site particulate emissions and will ensure compliance with Section 550 of NWAPA regulations (NWAPA 1993).

3.3 GEOLOGY, SOILS, AND SEDIMENT

3.3.1 Affected Environment

Whidbey Island geology is the result of glacial activity that occurred within the last one million years. Glacial and interglacial deposits on Whidbey Island may be up to 3,000 feet (914 m) thick (Jones 1985). The geologic stratigraphy consists primarily of glacial outwash, glacial drift, glaciolacustrine sediments, and glaciofluvial material of the last glaciation, which occurred about 20,000 years ago.

Whidbey Island soils are located on moraines, terraces, and terrace escarpments. The soils were formed from materials weathered from the glacial activity. Twenty five soil mapping units are found on Seaplane Base. Five of these have a rating of prime agriculture land and are also capable of supporting jurisdictional wetlands. Soils in the area of the MWR Marina are derived from fill material and have not been characterized or mapped.

The Seaplane Base includes approximately 10.1 miles (16.3 km) of shoreline, consisting of three types: modified shoreline, depositional beach, and high bank bluffs with varying erosion rates. The modified shoreline type consists of man-made seawalls, beach with dumped riprap rock and concrete rubble, and beach with pilings and plank bulkhead. The shoreline of Crescent Harbor is a modified shoreline and contains: (1) a man-made seawall on the north side of the isthmus between Oak and Crescent harbors; (2) beaches with rock and concrete rubble that extend east from the seawall along Crescent Harbor approximately 0.8 mile (1.3 km) including the shoreline bordering the MWR Marina; and (3) eroded bluffs on Maylor, Forbes, and Polnell Points. Long-term sediment transport to Crescent Harbor is from Maylor Point and Polnell Point. The depositional beach in Crescent Harbor totals approximately 1.4 miles (2.3 km).

Few data are available that describe sediments in the region of Crescent Harbor adjacent to the MWR Marina. Marine sediments in Puget Sound are usually locally derived from the

erosion of glacial sediments along the shoreline. Sediments in the quiet deep basins are much finer and composed of fine silts and clays. In general, maps compiled from University of Washington data (Roberts 1974) and published in the *Puget Sound Environmental Atlas* (Evans-Hamilton, Inc. and D.R. Systems, Inc. 1987) indicate that nearshore sediments in Crescent Harbor are composed of either mud-sand gravel or well-sorted sands and gravels and grade into muddy sand and eventually mud in deeper water. The area in the vicinity of the MWR Marina is characterized by mud and fine silts. Qualitative observations by Navy divers indicate a muddy bottom that is mostly barren with little vegetation (pers. comm., Klope, 1996). Sediment grain size at a station located in 66 feet (20 m) of water in Crescent Harbor showed 60 percent fines (i.e., silt and clay) (Tetra Tech 1990).

No information on contaminant levels in sediment at the MWR Marina exist. However, deterioration of the boat house (e.g., peeling lead-based paint and roof debris) may have caused some materials to have fallen into the water, possibly affecting sediment contaminant concentrations.

3.3.2 Environmental Consequences

Demolition of the boat house and renovation the MWR Marina associated with the Proposed Action would not affect geology or soils since the building is built on piles over water. Most of the demolition work would be done using a crane on a barge. Some demolition work would also involve the use of land-based machinery. In this event, it is unlikely that soils would be affected because most of the area around the boat house is already occupied by buildings or paved surfaces and would not be subject to significant construction-related erosion. In addition, the Navy would utilize Best Management Practices (BMPs) as defined by the WDOE and Island County to minimize potential erosion effects.

Short-term negative effects would occur due to demolition and renovation construction activities. Removal/installation of piles would have a transient effect on water quality by resuspension of marine sediments. Authorization for pile removal and installation would be required from the COE in compliance with the Rivers and Harbors Act. The anticipated effects would be temporary and limited in extent by the use of BMPs. The presence of peeling lead-based paint chips and other potential environmental hazards (i.e., remnant asbestos) during demolition of the boat house may affect marine sediments if some of this material falls into the water and settles to the marine sediment. A small amount of the contaminated marine sediments could end up on shore. In addition, construction and operation associated with the Proposed Action would require the Navy to process a Joint Aquatic Resources Permit Application (JARPA) with relevant agencies.

No dredge or fill material would be discharged to waters of the United States under the Proposed Action.

Operation of the MWR Marina under the Proposed Action would continue use of the nearshore environment established when the boat house was originally constructed. No fueling or boat maintenance activities would occur at the MWR Marina; therefore, no additional effects to the geology, soils, or marine sediments would occur. Analysis of existing data suggests minimal short-term effect to the contiguous marine environment from demolition and construction activities and no significant long-term effects from continuing operations.

Under the No Action Alternative, lead-based paint chips would likely peel off the walls of the boat house and fall into the water, settling in the marine sediment below and along the nearby shoreline. In addition, as the building deteriorates further, other roof and building debris would be expected to fall into the water. No other effects are expected under the No Action Alternative.

3.3.3 Mitigation Measures

To ensure that the effects of the Proposed Action on soils or sediments are minimized, the following mitigation measures will be implemented as part of the Proposed Action, if selected:

- GSS-1 The Navy contractor will implement BMPs, as defined by WDOE and Island County, to minimize erosion during demolition and renovation.
- GSS-2 The Navy contractor will use BMPs during building demolition to ensure that construction debris, including lead-based paint chips, do not enter the water or contaminate marine sediments.
- GSS-3 The Navy contractor will minimize the risk of soil contamination during construction by restricting fueling and equipment maintenance to a designated staging area with an impermeable surface and a spill containment and clean-up kit.
- GSS-4 The Navy will obtain authorization for pile removal and installation from the COE, pursuant to Section 10 of the Rivers and Harbors Act, and will process a JARPA with applicable agencies.

3.4 HYDROLOGY AND WATER QUALITY

3.4.1 Affected Environment

Groundwater is the primary source of drinking water on Whidbey Island. EPA has classified the groundwater of Whidbey Island as a sole source aquifer (47 FR 66, 6 April 1987). WDOE has designated Island County as a groundwater management area under

Washington Administrative Code (WAC) 173-100, ranking second in priority within the state. Island County has prepared a Ground Water Management Program (ICGWMP) to guide education, conservation, monitoring, regulation, and coordination efforts. Contamination of groundwater supplies is a major concern within Island County.

Recharge to the groundwater system of Whidbey Island is through infiltrating precipitation. Recharge is highest during the winter and spring. Natural discharge from the aquifer occurs as a result of groundwater outflow to the marine waters. Whidbey Island groundwater yields range between 50 and 350 gallons per minute (gpm) (189 to 1,325 lpm), with most wells yielding less than 100 gpm (379 lpm). An average of 6% of the precipitation percolates to recharge the aquifer, and aquifer recharge is the preferred method for surface water disposal from a site within the ICGWMP. Water tables generally follow the topography, although perched water tables exist in some locations.

Northern Whidbey Island was selected by the Island County Watershed Ranking Report (Island County 1988) as the top priority regional watershed in the county. This rank is based on existing or potential contributions of nonpoint source pollution to Puget Sound and the sensitivity of the areas receiving discharges (e.g., shellfish beds). The three watersheds with the highest rankings are Oak Harbor/Crescent Harbor, Dugualla Creek, and Penn Cove (Department of the Navy 1993).

The primary surface water body in the vicinity of the MWR Marina is Crescent Harbor in northern Puget Sound, near the City of Oak Harbor. Crescent Harbor waters are marine with semidiurnal tidal fluctuations averaging approximately 10 feet (3 m) with maximum tides of about 17 feet (5 m). Tidal currents in the vicinity of Crescent Harbor average 0.88 in/sec (2.25 cm/sec) (Evans-Hamilton, Inc. and D.R. Systems, Inc. 1987). No documentation on the quality of the surface waters near the MWR Marina was identified. Qualitative diver observations indicate that water clarity and visibility depend on the tides and weather; there is lower visibility during severe weather events (pers. comm., Klope, 1996).

Surface water runoff occurs from precipitation on soils with low infiltration rates. Low infiltration rates typically occur on clay soils, soils with a high water table, on shallow soils over impervious materials, or from precipitation on impervious surfaces. The area surrounding the MWR Marina consists mainly of impervious surfaces with surface water runoff to Crescent Harbor.

3.4.2 Environmental Consequences

The implementation of the Proposed Action would have limited effects on the physical environment. Temporary disturbances during demolition and construction would be localized to the construction site. Removal and installation of piles would have a transient effect on water quality by resuspension of sediments. During demolition of the boat house and renovation of the MWR Marina, it is expected that there would be temporary increases in local turbidity during pile driving and pile extraction activities. The turbidity is expected

to be minor and would settle to the bottom of the harbor in the proximity of the MWR Marina. Increases in Crescent Harbor turbidity immediate to the project site would be of concern during the short duration of pile removal and installation.

Operation of the renovated MWR Marina would be consistent with current land use practices and is not expected to cause additional effects to the marine environment. Operation of the MWR Marina would increase the number of boats that could potentially leak or spill fuel or oil. Established spill contingency plans and equipment, however, would continue to be maintained in readiness and accommodate the increased boat use at the marina. Oil containment booms are located nearby and their use is a standard part of the Navy's MWR Marina operations. Elimination of mooring buoys would decrease the risk of boats washing ashore and potentially leaking fuel or hazardous substances. No effects to marine vegetation would be expected because no marine vegetation (e.g., eelgrass beds) has been observed in the project vicinity; any potential effects would be limited to the immediate area of the MWR Marina where construction activities would produce temporary disturbances in the water columns, such as turbidity increases. Demolition and construction would be carried out in a manner to minimize effects to water quality.

Under the No Action Alternative, continued deterioration of the boat house could result in additional lead-based paint chips entering the water, possibly affecting water quality in the immediate vicinity.

3.4.3 Mitigation Measures

Mitigation measures GSS-1 through GSS-4 will be implemented as part of the Proposed Action, if selected, and will adequately minimize potential effects to hydrology and water quality.

3.5 CULTURAL RESOURCES

This section discusses potential effects to cultural resources from the Proposed Action and the No Action Alternative.

3.5.1 Affected Environment

Two types of cultural resources may be affected at the MWR Marina: (1) archeological resources, which may include districts, sites, or objects that have yielded or are likely to yield information important in prehistory or history; and (2) historic resources, which may include districts, sites, buildings, structures, or objects that relate or convey some aspect of American history, architecture, engineering, archeology, and/or culture. Activities that affect cultural resources are regulated by Federal, State, and local legislation. The primary law affecting cultural resources is the National Historic Preservation Act (NHPA) of 1966 (16 USC § 470), as amended. NHPA requires project

proponents to identify any effects its actions may have on cultural resources listed in or eligible for listing in the National Register of Historic Places (NRHP, or National Register).

Seven archeological sites have been identified at the Seaplane Base. None of the sites are located at or near the MWR Marina (Department of the Navy 1994). Archeological investigations at the Seaplane Base were conducted in 1994 and identified areas with high probability to contain archeological resources. The MWR Marina and boat house are not located in or near a high probability area (Department of the Navy 1994). Moreover, original construction of the boat house and other buildings in the area has disturbed the soil extensively. Large quantities of fill material were brought in to create the Seaplane Base. It is unlikely that archeological resources exist at the MWR Marina area.

The boat house is in an area proposed as a potential Seaplane Base Historic District. The District may be eligible for listing in the NRHP by the State Historic Preservation Officer (SHPO) (letter from OAHP 1995; Department of the Navy 1994). The proposed District is described in the Draft NASWI Historic and Archaeological Resources Protection (HARP) Plan, which is planned to be updated and finalized by the Navy in 1997. In the late 1930s and early 1940s, the United States began a major military buildup in response to increasing international tensions and the outbreak of World War II in Europe. As part of this buildup, starting in 1941, the Navy began developing the Seaplane Base (originally called the Rearming Base), as well as Ault Field, to defend the Strait of Juan de Fuca and Puget Sound (Department of the Navy 1994).

Upon the entry of the United States into World War II in December 1941, development proceeded rapidly, with the Austin Company as the primary contractor. In addition to providing a base of seaplane operations, the Seaplane Base and Ault Field, together known as U.S. Naval Air Station Whidbey Island, provided an important training center. At the end of the war, operations were dramatically scaled back. Land-based planes became strategically important and newer development focused on Ault Field. The Seaplane Base, which was originally the primary operational area, became a support area for the land-based plane operations at Ault Field. The last seaplane left the Seaplane Base in 1970 (Department of the Navy 1994).

The proposed Seaplane Base Historic District has approximately 40 contributing buildings and structures related to operations as well as numerous residential buildings (Department of the Navy 1994). The boat house and Building 81, a small craft machine shop adjacent to the boat house and connected to it via a steel monorail, are both considered contributing buildings to the proposed Seaplane Base Historic District. The boat house, built in 1942 and expanded in 1944, housed Navy boats used to support seaplane operations. Building 81, built in 1943, served as a boat repair facility.

Since the 1970s, the MWR Marina no longer exclusively houses Navy boats but also houses recreational boats. Some NASWI departmental boats are also moored at the MWR Marina. During the 1980s, the boat house began to deteriorate and was eventually

declared unsafe by the NASWI Fire Department in 1993. The current condition of the boat house is unsafe and it no longer serves its historic function. No boats are currently housed within the boat house. Currently, the adjacent MWR Marina concrete floats provide moorage for 11 boats.

3.5.2 Environmental Consequences

The Proposed Action includes the demolition of the boat house and renovation of the MWR Marina. While ground disturbing activities associated with construction have the potential to damage or disturb archeological resources, the area around the boat house is not anticipated to contain archeological resources based on archeological studies conducted in 1994. Therefore, demolition of the boat house and expansion of the MWR Marina are not anticipated to have an adverse effect on archeological resources. While unlikely, it is possible that unidentified sub-surface archeological resources may be present. If such resources are present, construction could damage or disturb them.

Demolition of the deteriorated superstructure of the boat house would completely alter the historic character of the area. The boat house would no longer convey a sense of time and place and would no longer relate to its historic World War II period. Such a major alteration would constitute an adverse effect on the boat house.

Pursuant to Section 106 of the NHPA, the Navy has consulted with the SHPO regarding the Proposed Action. The Navy and the SHPO have developed an MOA to address this adverse effect (Appendix B). The MOA calls for the Navy to prepare an Historic American Buildings Survey (HABS) report for the boat house prior to its demolition. Furthermore, under the MOA, the Navy will erect an interpretive display at or near the boat house location to inform the public of the history and appearance of the boat house. These two measures fully mitigate the adverse effect of the demolition of the boat house. Therefore, no significant environmental effect to historic resources is anticipated from the demolition of the boat house or renovation of the marina.

Building 81 is connected to the boat house by a steel I-beam monorail. The demolition of the boat house and removal of the connecting monorail has the potential to accidentally damage Building 81. Any accidental damage to Building 81 would constitute an adverse effect on this resource. However, such damage is unlikely since there is adequate space to maneuver heavy equipment and removal of the monorail should not be difficult.

Under the No Action Alternative, no effects to archeological or historic resources would be anticipated. However, continued deterioration of the boat house would occur with potential collapse of the building sometime in the future.

3.5.3 Mitigation Measures

The following mitigation measures will be implemented to reduce potential adverse effects to cultural resources associated with the Proposed Action, if selected.

- CR-1 The Navy will halt construction and consult with the SHPO if an unanticipated discovery of archeological resources should occur during construction to determine the potential significance of the resources and to identify appropriate mitigation measures, if any.
- CR-2 The Navy will complete the stipulations of the MOA between the Navy and SHPO, including preparation of a HABS report on the boat house and the construction of an interpretive display for the boat house.
- CR-3 The Navy will ensure that removal of the monorail between the boat house and Building 81 is completed in a manner that does not harm or alter Building 81.

3.6 WILDLIFE AND FISHERY RESOURCES

3.6.1 Affected Environment

There are approximately 60 water and shorebirds, 83 land-based bird species, and 17 terrestrial mammals that are common at NASWI at least during parts of the year (Department of the Navy 1991). In addition, there are 12 species of marine mammals, 94 saltwater fish species, and most marine invertebrates common throughout northern Puget Sound (e.g., crustaceans, mollusks) that potentially occur near the MWR Marina. The following sections describe resources associated with the Proposed Action and No Action Alternative.

Terrestrial Wildlife

The developed nature of the MWR Marina area precludes most terrestrial wildlife from occurring there. Mammals that may occur near the MWR Marina include coyote (*Canis latrans*), cottontail rabbit (*Sylvilagus florianus*), Douglas squirrel (*Tamiasciurus douglasii*), mice (*Peromyscus* sp.), voles (*Microtus* sp.), and moles (Family Talpidae) (Department of the Navy 1991). The existing boat house and MWR Marina facilities are used for perching on occasion by several species of birds, including kingfishers (*Ceryle alcyon*), great-blue heron (*Ardea herodias*), and various species of gulls (*Larus* spp.). Cliff swallows (*Hirundo pyrrhonota*) also occur near the MWR Marina and may nest in the boat house. In addition, bald eagles (*Haliaeetus leucocephalus*) perch on the nearby lightpost associated with the fuel pier. Various species of shorebirds and water birds may

use the shorelines near the MWR Marina for resting or foraging, but the disturbed nature of the site probably eliminates nesting habitat.

Waterfowl and Waterbirds

The most common seabirds that occur near the MWR Marina include species of gulls (*Larus spp.*), grebes (Family Podicipedidae), scoters (*Melanitta spp.*), cormorants (*Phalacrocorax spp.*), and other waterfowl and waterbirds. The western portion of Crescent Harbor near the MWR Marina receives substantially less waterfowl use than the eastern portions where there is less human disturbance.

Marine Mammals, Fish, and Invertebrates

The waters of Puget Sound support an abundant variety of marine life including marine mammals, marine fish, crustaceans, mollusks, and other invertebrate species. The following sections summarize the most common species potentially occurring near the MWR Marina.

Marine Mammals

The open waters of northern Puget Sound are home to three groups of marine mammals representing 21 species, both year-round and migratory visitors: cetaceans (whales), pinnipeds (seals and sea lions), and mustelids (otters). All of these marine mammals are protected by the Marine Mammal Protection Act. Although more than 12 species of whales have been sighted in Puget Sound, most are rare or accidental visitors. Species considered permanent or seasonal residents include killer whale or orca (*Orcinus orca*), minke whale (*Balaenoptera acutorostrata*), gray whale (*Eschrichtius glaucus*), Dall's porpoise (*Phocoenoides dallii*), harbor porpoise (*Phocoena phocoena*), and Pacific white-side dolphin (*Lagenorhynchus obliquidens*). Cetaceans that breed in Puget Sound include Dall's porpoise and orca. Other observed mammals that inhabit both open waters and the shorelines of Whidbey Island include harbor seal (*Phoca vitulina*), Stellar or Northern sea lion (*Eumetopias jubatus*), California sea lion (*Zalophus californianus*), Northern Elephant seal (*Mirounga angustirostris*), and river otter (*Lutra canadensis*), an aquatic mammal.

There are three known resident orca whale pods and 17 transient pods in the Puget Sound (Osborne et al. 1988). Resident pods have well-defined territories, while transient pods range widely throughout Puget Sound and the Pacific Ocean. Both resident and transient pod movements are related to food availability. There are no records of orca whales using Crescent Harbor. Dall's porpoise are common off the west and south sides of Whidbey Island and are not likely to be present near the MWR Marina. The other four species of cetaceans (harbor porpoise, Pacific white-sided porpoise, gray whale, and minke whale) that are occasionally observed in Puget Sound are non-breeding visitors.

Commonly observed pinnipeds in Puget Sound include harbor seal, California sea lions, northern Stellar sea lion, and northern elephant seal. Most of these are seasonal visitors. Of these four species, only harbor seals are permanent breeding residents. Harbor seals are the most common pinniped in Puget Sound and are commonly observed in Crescent Harbor. They typically haul out at least once a day, usually at low tide, on islands, rock ledges, and log rafts. Harbor seals use a haul out location on the east end of Crescent Harbor approximately 2.75 miles (4.4 km) from the MWR Marina (opposite the MWR Marina) (Evans-Hamilton, Inc. and D.R. Systems, Inc. 1987).

The Stellar sea lion and humpback whale (*Megaptera novaeangliae*) are classified as threatened or endangered species and may be present in the Crescent Harbor area on rare occasions (pers. comm., Gaar, 1996).

Marine Fish

Puget Sound supports a large variety of salmonids, groundfish, and other fish. Approximately 94 species of salt water fish identified in northern Puget Sound may exist in suitable habitats along the offshore areas of Seaplane Base. According to the *Puget Sound Environmental Atlas* (Evans-Hamilton, Inc. and D.R. Systems, Inc. 1987), the area near Seaplane Base in Crescent Harbor is not used extensively for commercial or tribal fishing.

Qualitative diver observations at the MWR Marina in June 1996 indicate that no large fish or groundfish were seen in the vicinity of the MWR Marina. The divers noted many schools of pile perch (*Rhacochilus vacca*) and shiner perch (*Cymatogaster aggregata*) present in the area. The divers also noted that salmonids may pass through this area, but were not noted during their dives (pers. comm., Klope, 1996).

All seven anadromous fish species that are currently candidates for listing under the Endangered Species Act (ESA) (see Appendix A) are known to be present near Crescent Harbor, although none are known to occur in the immediate MWR Marina area. These species include: chum, chinook, coho, sockeye, and pink salmon (*Oncorhynchus keta*, *O. tshawytscha*, *O. kisutch*, *O. nerka*, and *O. gorbuscha*); and steelhead (*O. mykiss*) and sea-run cutthroat trout (*O. clarkii clarki*) (pers. comm., Gaar, 1996).

Available information indicates that no listed Snake River salmon (*O. nerka* and *O. tshawytscha*) are in the Crescent Harbor area or immediately downstream from the harbor. In addition, critical habitat for the listed species does not include the Crescent Harbor area. None of the species proposed for listing are found in the MWR Marina area (pers. comm., Gaar, 1996).

Marine Invertebrates

Marine invertebrates occurring in the vicinity of the MWR Marina are typical of those found throughout northern Puget Sound. There are 9 crustaceans, 12 mollusks, and 6 other invertebrates common to the northern Puget Sound area. Many species of shellfish, including clams, oysters, crabs, and shrimp, are harvested by sport, commercial, and tribal interests in northern Puget Sound but not heavily in Crescent Harbor (Evans-Hamilton, Inc. and D.R. Systems, Inc. 1987). Crustacean species noted during qualitative diver surveys at the MWR Marina include Dungeness and rock crabs (*Cancer magister* and *C. productus*). Most of the bottom was barren during the survey in June 1996 with occasional starfish (Class Asteroides) and sea pens (*Ptilosarcus gurneyi*) noted on the mud bottom (pers. comm., Klope, 1996).

Wooden piles support somewhat different biological communities. Qualitative diver observations indicate that typical biological communities are associated with the piles (pers. comm., Klope, 1996). The wooden pile aquatic communities can be characterized by the following zones:

- Barnacle-Mussel Zone (0 to -10 ft [0 to -3 m]) - in this zone, barnacles (*Balanus* spp., *Chthamalus dalli*) and mussels (*Mytilus edulis*) predominate. Starfish (*Pisaster* spp.) are occasionally found in this zone.
- Mixed Zone (-10 to -15 ft [-3 to -5 m]) - the mixed zone contains mussels, barnacles, jingles (*Pododesmus macroschisma*), occasional tubeworms (*Eudistylia polymorpha*), starfish, and sea anemones (*Metridium senile*).
- Tubeworm Zone (-15 to -28 ft [-5 to -9 m]) - this zone is dominated by the sebellid tubeworm. Also scattered throughout this zone are sea anemones, jingles, sea urchins (*Strongylocentrotus droebachiensis*), starfish (*Pisaster ochraceus*, *Pycnopodia helianthoides*, *Evasterias troschelii*), and numerous crabs, tunicates, and fish.
- Thin Barnacle Zone (-28 to -30 ft [-9 to -9.1 m]) - only small barnacles and scattered starfish are found in this zone.

The existing MWR Marina, boat house, and EOD float shade approximately 65,475 square feet (6,082 m²) of marine aquatic habitat. This shading generally reduces the biological productivity at the site.

Threatened and Endangered Species

The bald eagle, a threatened species under the ESA and Washington Endangered Species Act, is known to occur near the site (letter from FWS 1996; letter from WDFW 1996). The Navy is currently preparing a revised Bald Eagle Management Plan for NASWI and has collected over one year of observational data at the Seaplane Base. These observations indicate that eagles occur at the Seaplane Base on a year-round basis. Along

with an active nest approximately 3 miles (5 km) east of the MWR Marina, a pair has constructed a new nest on NASWI property less than 0.5 mile (0.8 km) from the boat house in the forest bordering Oak Harbor (EDAW 1996). This nest was first documented in March 1996 but has since been damaged by high winds. No young were produced in 1996; it is likely that eagles may repair the nest in the same general vicinity in 1997 (pers. comm., Klope, 1996).

There were several observations of bald eagles using the light poles at the main pier (see Figure 2.1-3) for perch sites, indicating they are somewhat habituated to the activity in the area. The MWR Marina area is not, however, heavily used perching or foraging habitat. The shorelines of Forbes Point and Crescent Harbor (see Figure 2.1-2) are regularly used by as many as nine eagles at a time. Most of these birds perch on the live trees and snags along the shoreline and hunt for waterfowl or fish in Crescent Harbor (EDAW 1996).

The marbled murrelet (*Brachyramphus marmoratus*), a threatened species protected under the ESA, does not occur near the MWR Marina (pers. comm., Klope, 1996). These waterbirds forage on small fish and fly to old-growth conifer forests for nesting. Marbled murrelets are commonly observed foraging in the less disturbed portions of Crescent Harbor east of the MWR Marina at or near Polnell Point, approximately 2 miles (3.2 km) from the MWR Marina (Figure 2.1-2) (pers. comm., Klope, 1996). These birds do not use marine foraging habitats in the immediate vicinity of the MWR Marina and no suitable nesting habitat occurs near the MWR Marina.

The peregrine falcon (*Falco peregrinus*), a Federally listed endangered species, occupies a nesting territory near Skagit River delta, approximately 7 miles (11.3 km) from the MWR Marina (WDFW 1996). However, it is unlikely that the falcon occurs near the MWR Marina, even as a transient visitor, given the level of activity and disturbance.

3.6.2 Environmental Consequences

Demolition of the existing boat house and temporary removal of piles would result in temporary disturbance and habitat loss for wildlife species that occur in the area. The demolition period would last approximately 3 months. In addition, the marina renovation period would occur during short, 1- to 2-week periods spread over a 5-year period. The operation of cranes and other heavy equipment would temporarily cause more mobile wildlife species to leave the area. Other than the possible swallow nesting habitat in the boat house, no habitat would be lost due to demolition or renovation.

Temporary construction noise associated with demolition and pile driving could potentially disturb bald eagles that occur in the area during the allowable construction period from August 16 to January 14. Wintering eagles use Forbes Point and Crescent Harbor from November through February, and nesting bald eagles use the area between January and August and could be affected by construction activities during those time

periods. During September and October, resident and migratory eagles are present at the Seaplane Base but would not be as susceptible to disturbance.

There are no known standards for acceptable noise levels for bald eagles. EPA (1971) has indicated that a level of 85 decibels (dB) is required to scare birds (species unknown). Ellis (1981) summarized the possible effects of noise on nesting raptors, which include: (1) temporary nest abandonment causing exposure of eggs or young to inclement or severe weather, (2) physiological stress leading to reduced reproductive success, (3) permanent nest abandonment, and (4) death of young due to premature fledging. Bottorff et al. (1987) reported that pile driving at Washington State Ferry terminals in the San Juan Islands resulted in peak noise levels greater than background levels out to between 0.25 and 0.5 mile (0.4 and 0.8 km); beyond that distance, most construction noise was no higher than background noise. That study indicated that driving wooden piles had no visible effect on eagle activity or behavior, although driving steel piles may have disturbed eagles at a distance of 4,000 feet (1.2 km). The degree of disturbance depends on the level of noise the eagles are accustomed to; eagles that use areas with higher noise levels may be less susceptible to disturbance than eagles not used to loud noises. Eagles are often disturbed more by pedestrians than vehicles or machinery (Stalmaster 1987; pers. comm., Watson 1996). The loss of piles would not significantly reduce bald eagle perches along Crescent Harbor (EDAW 1996).

The Proposed Action is not likely to adversely affect the threatened marbled murrelet, since this species tends to forage farther out in Crescent Harbor at Polnell Point away from the MWR Marina. The potential effects to its foraging habitat will be minimized through BMPs intended to contain any accidental hazardous materials spills during construction. The increased boat traffic is not likely to adversely affect murrelets, since the traffic will be sporadic and concentrated near the marina away from Polnell Point.

The Proposed Action would benefit aquatic biota by removing most of the covered boat house mooring area. This would eliminate approximately 51,285 square feet ($4,764 \text{ m}^2$) of permanent structure surface area, which represents a 78% decrease in shading from current conditions. This would provide a substantial local increase in light penetration in the shallower portions of the site and a net reduction of approximately 64 creosote-treated wooden piles. If the removed piles cannot be reused, concrete piles would be used instead to anchor the new floats. The new piles would provide additional surface area for the attachment of both flora and fauna.

Benthic fauna in the immediate vicinity of the piles would be disturbed by the construction activities, but the effects would be very localized and temporary. A very small number of sessile marine organisms, those associated with the piles to be removed, would be killed. Operational effects would not be significantly different in quantity or quality than those already established by previous MWR Department operations at the MWR Marina.

Juvenile salmon migrating from fresh to saltwater could be affected by the Proposed Action if construction activities were scheduled during the March 15 to June 15 migration window.

However, since the immediate MWR Marina area does not support significant salmon populations, the effect of the construction would be minimal.

The Proposed Action would not cause short-term nor long-term restrictions to fish movement. The existing MWR Marina operations have been ongoing since the 1970s and the Proposed Action would approximately double the boat capacity (increase of 25 to 35 slips); however, there is no anticipated adverse effect to the existing species or their habitat as a result of the Proposed Action.

No aquatic threatened or endangered species are likely present near the MWR Marina; therefore, there would be no effect on these species or their habitat from the Proposed Action. However, informal consultation with the USFWS would be required.

Additional permitting and consultation requirements that the Navy will potentially need to comply with include: (1) Washington State Hydraulic Project Approval (HPA), which is needed any time that a project uses, diverts, obstructs, or changes the natural flow or bed of any waters in the state; (2) Shoreline Substantial Development Permit, which is required for work or activity in the 100-year floodplain; and (3) Section 10 Permit issued by the COE for any work in or affecting navigable waters of the United States. All of these permits can be applied for through the JARPA process. Informal consultations with the USFWS and NMFS will also be conducted to ensure that no threatened or endangered species will be adversely affected by the Proposed Action.

The No Action Alternative would not significantly affect aquatic biota resources; however, the beneficial effects of reducing ocean floor shading, removing lead-based paint from the structure, and removing creosote-treated wood piles from the water would not occur. The No Action Alternative would not affect wildlife or fisheries, but would forego the possible improvements in aquatic habitat that would result from boat house removal. The boat house would continue to deteriorate and debris may be expected to fall into the water over time adversely affecting aquatic organisms.

3.6.3 Mitigation Measures

To ensure that effects to wildlife and fishery resources are minimized, the following mitigation measure will be implemented as part of the Proposed Action:

- WFR-1 The Navy will conduct major demolition work, heavy-equipment construction, and pile driving activities only during the allowable construction period (outside of the period from January 15 to August 15) to minimize disturbance to bald eagles during the nesting and wintering period. During construction activities, the Navy will continue to observe eagles at the Seaplane Base as described in the NASWI Draft Bald Eagle Management Plan (EDAW 1996).

- WFR-2 The Navy will schedule in-water construction activities to avoid the March 15 to June 15 migration window to eliminate potential effects to juvenile anadromous fish migrating from fresh to saltwater.
- WFR-3 The Navy will mitigate potential adverse effects to the marine environment by providing for a net decrease of approximately 64 creosote-treated timber piles. Removal of old, preservative-laden timber piles is viewed as a positive effect on the local marine environment.
- WFR-4 The Navy will comply with agency consultation and permitting requirements including: (1) Washington State Hydraulic Project Approval to mitigate for potential adverse effects to water quality and fish habitat; (2) COE permitting; and (3) informal consultation with USFWS, WDFW, and NMFS.

Mitigation of construction effects will be accomplished by application of mitigation measures GSS-1 through GSS-4.

3.7 NOISE

3.7.1 Affected Environment

Several sound descriptors have been developed to summarize how people hear sound and to measure the effect of environmental noise on public health and welfare. The day-night sound level (Ldn) is the sound level for a 24-hour period with an additional 10 decibels (dBA) weighting imposed on the equivalent sound levels occurring during night-time hours (10 p.m. to 7 a.m.). The added sound level to this noise descriptor is used to account for the greater sensitivity of people to noise during these evening and night-time periods.

In general, humans can perceive noise level differences of about 3 dBA or greater; however, a change in the noise level of at least 5 dBA is required before any noticeable response is expected. A difference of 10 dBA is perceived as a doubling of loudness, and would almost certainly cause an adverse change in community response.

The EPA suggests the use of the Ldn noise descriptor to relate noise in residential environments causing interference with speech, sleep, and other activities. EPA studies (EPA 1978) indicate that non-construction related levels of 55 Ldn or lower are acceptable, levels of 55 to 65 Ldn cause some effect, levels of 65 to 70 Ldn cause adverse effects, and levels of 70 Ldn or higher are unacceptable. Various guidelines have also been developed by other Federal agencies.

Ecology has also established environmental noise limits. These limits are defined in terms of an Environmental Designation for Noise Abatement (EDNA), which considers the use of the property and adjacent lands. However, noise generated at temporary

construction sites as a result of construction activities (between the hours of 7 a.m. and 10 p.m.) is exempt from these limits.

The MWR Marina is bounded by industrial and commercial land uses. The closest noise-sensitive locations are Naval housing complexes approximately 0.3 mile (0.5 km) to south and 0.5 mile (0.8 km) to the north from the MWR Marina.

Flight tracks for Navy flights at Ault Field go over Crescent Harbor and increase ambient noise levels to 60 to 65 dB near the MWR Marina and at the Naval housing complexes (Department of the Navy 1988).

3.7.2 Environmental Consequences

Construction noise would be temporary and would include noise from activities such as site preparation, truck hauling of material, use of cranes, pile driving, and building construction. Except for pile driving, the increase in noise levels is not expected to be significant. Typical noise levels associated with different phases of construction are shown in Table 3.7-1 below. Bottorff et al. (1987) indicated that pile driving produced peak noise levels of 98 dBA within 30 feet (9 m) of the activity and that the noise decreased by approximately 8 dBA for every doubling of the distance until noise levels were below ambient levels at a distance of approximately 860 feet (262 m). Therefore, it is not expected that persons at any of the housing complexes will hear the MWR Marina demolition or renovation since the nearest housing complex is approximately 0.3 mile (0.5 km) away from the marina.

Table 3.7-1. Typical Construction Noise Levels.

Construction Phase	Peak Average ¹ Noise Level (dBA)	Typical Average ² Noise Level (dBA)
Pile driving	98	NA
Foundations	78	73
Erection	85	80
Exterior Finishing	89	84

¹ During heavy activity periods.
² Averaged over an entire day of typical activities.

Source: Bolt et al. 1971; Bottorff et al. 1987

Operational noise effects associated with the Proposed Action would be caused by increased automobile and boat traffic. Since the renovated MWR Marina facility would be operated by existing MWR personnel, the only increase in traffic would be new MWR Marina visitors. The increase in approximately 20 peak period trips would be insignificant relative to the over 7,500 daily trips on the Seaplane Base. The increased traffic noise would therefore be insignificant. Residents at NASWI would notice no significant increase in noise level due to MWR Marina operations.

The No Action Alternative would eliminate short-term noise effects associated with construction activity. There would be no effect on long-term noise levels from implementation of the No Action Alternative.

The effects of noise on wildlife are discussed in Section 3.6.2.

3.7.3 Mitigation Measures

The following mitigation measure will be implemented to minimize noise effects during construction as part of the Proposed Action:

- N-1 The Navy will minimize noise emissions during construction in compliance with Navy Environmental and Natural Resources Manual (OPNAVINST 5090.1B) that requires maximum use of low noise emission products, as certified by EPA, for all Navy-related operations; as well as compliance with other Federal and State regulations pertaining to construction-related noise generation. Measures to reduce construction noise will include: (1) limiting construction activities to normal daytime periods between 7 a.m. and 7 p.m. Monday through Saturday, (2) using equipment with proper mufflers or noise control devices, and (3) situating noise-generating equipment near construction activities only.

3.8 ENVIRONMENTAL JUSTICE

3.8.1 Affected Environment

In February 1994, the President issued Executive Order 12898 that requires all Federal agencies to seek to achieve environmental justice by “identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations” (Executive Order 12898). The DoD followed in March 1995 with its Strategy on Environmental Justice to meet the intent of Executive Order 12898, which the EPA approved in April 1995. The Navy has established policies and assigned responsibilities with the goal of preventing disproportionately high and adverse human or environmental effects on minority and low-income populations. The strategy states that DoD would use NEPA as the primary mechanism to implement the provisions of the Executive Order. In response to this strategy, the Navy is making this EA available to State and local governments, the Swinomish and Samish Tribes, and other organizations so that possible concerns about the potential effects of the Proposed Action can be expressed.

Island County exhibits a lower percentage of racial and ethnic minorities (other than Hispanic) than Washington State as a whole. Compared to the nation as a whole, Island

County has a lower percentage of Blacks and Hispanics. Approximately 23 percent of the population is composed of males between 20 and 23 years of age (Department of the Navy 1988). Demographic data for Island County are presented in Table 3.8-1.

Table 3.8-1. Island County 1990 Population Characteristics.

Race/ Ethnicity	Island County		Washington State		United States	
	Number	Percent	Number	Percent	Number	Percent
White	55,093	89.7%	4,308,937	88.5%	199,686,070	80.3%
Black	1,552	2.5%	149,801	3.1%	29,986,060	12.1%
Native American	536	0.9%	81,483	1.7%	1,959,234	0.8%
Asian/ Pacific Islander	2,397	3.9%	210,958	4.3%	7,273,662	2.9%
Hispanic (any race)	1,855	3.0%	115,513	2.4%	9,804,847	3.9%
Total	61,433	100.0%	4,866,692	100.0%	248,709,873	100.0%

Source: U.S. Bureau of the Census 1992

The proposed site is near existing residences but is not near a predominantly minority or low-income community.

3.8.2 Environmental Consequences

Demolition, renovation, and ongoing operation of the MWR Marina would not have a significant adverse effect on minority or low income communities, including Native American Tribes. No significant increase in pollution or health risks are anticipated as a result of the Proposed Action.

The No Action Alternative would have no effect on environmental justice.

3.8.3 Mitigation Measures

The following mitigation measure will be implemented as part of the Navy's compliance with Executive Order 12898 and NEPA:

- EJ-1 The Navy will distribute this EA in compliance with Executive Order 12898 and NEPA to the Swinomish and Samish Tribes to ensure that these minority groups receive adequate information concerning the Proposed Action. Requests from any minority or ethnic groups or organizations for information and/or copies of this EA will be met in a timely manner by the Navy.

3.9 ENVIRONMENTAL RESOURCES CONSIDERED BUT ELIMINATED FROM DETAILED ANALYSIS

Ten resource topics related to the Proposed Action were found to have minor or negligible effects and are briefly discussed below.

3.9.1 Aesthetics/Visual Quality

Potential effects to the existing aesthetics/visual resources from implementation of the Proposed Action or the No Action Alternative were assessed by evaluating the proposed project from key viewing locations (i.e., residential areas, main roads, designated vista points or recreational facilities).

The portion of the Seaplane Base surrounding the MWR Marina is heavily developed, with the existing MWR Marina and boat house, main pier, Navy Exchange, Commissary, EOD facility, large paved areas, boat ramps, and parking lots (Figure 2.1-3). The hillside to the south of the MWR Marina area is composed of shrubs and landscaped lawn. The electronic combat training (ECT) facility is located on the coastline bluff and is a prominent visual feature because of its large radome atop a two-story structure. Only a few trees exist in the immediate area; the nearest forested stand is 0.3 mile (0.5 km) to the southwest. Military housing complexes are located to the south and northwest of the MWR Marina (Figure 2.1-2).

The existing MWR Marina and boat house are visible from the bluff and ECT facility, parking lots adjacent to the MWR Marina, and from East Pioneer Road and portions of Torpedo Road across Crescent Harbor (Figure 2.1-2). Ground-level landward views near the MWR Marina are restricted in some directions by the rolling topography. The boat house is not visible from the designated vista viewing area at Forbes Point on the Seaplane Base or from key viewing locations off of Navy property.

During construction, short-term effects to visual resources would include: (1) the presence of a barge, crane, pile driver, and other equipment that may be visible from various locations on the Seaplane Base; and (2) the use of a small portion of the parking lot east of the Navy Exchange as a construction staging area and temporary storage area for boat house debris and materials. These effects are expected to occur over approximately a 3-month period. Since the area is already heavily developed and neither the equipment nor the staging/storage area would be visible from residential areas or key viewpoints, the effects are considered insignificant.

The existing boat house obstructs views of Crescent Harbor from the landward portions of the MWR Marina. Removal of the boat house and proposed construction of an observation/picnic area in the corner deck area of the existing boat house would improve views of Crescent Harbor from the MWR Marina area. The renovated MWR Marina facilities would be close to the water surface, with only piles protruding 15 to 20 feet (4

to 6 m) above the water surface (at zero tide). The new MWR Marina facility would be compatible with the surrounding environment, resulting in beneficial effects to aesthetics/visual resources from the Proposed Action.

The No Action Alternative would result in retention of the boat house and, due to its continued deterioration, worsening visual conditions near the MWR Marina. No public observation/picnic area would be provided.

As no significant impacts are anticipated, no mitigation measures are required as part of the Proposed Action.

3.9.2 Traffic and Circulation

Existing road access and parking facilities are available near the MWR Marina and Exchange for use by MWR Marina visitors. Visitors may enter NASWI by way of Maui Avenue and access the MWR Marina by Coral Sea Avenue and Tulage Avenue. Access to State Route (SR) 20, the primary highway in northern Whidbey Island, is available from East Pioneer Way, 70th NE Street, or Torpedo Road (Figure 2.1-2). Near the MWR Marina, the major traffic flow on the Seaplane Base is on the north end of Coral Sea Avenue near the Navy Exchange. A 1986 traffic study indicated that approximately 7,500 vehicles travel this section of roadway each working day (Steedman 1986). That study indicated that less than 6% of the Coral Sea Avenue peak evening traffic turns toward the MWR Marina. There is no identified traffic congestion at the MWR Marina or at the intersection of Tulage and Coral Sea avenues, although parking can be limited at certain times and heavy traffic in the areas of the Family Service Center, Commissary, EOD complex, and Navy Lodge can occur (pers. comm., Maher, 1996).

None of the State or County roadways in the vicinity of the MWR Marina currently have level-of-service (LOS) ratings of "D" or worse (Island County 1994). LOS D is considered to be the roadway service level beyond which traffic levels may create adverse effects. The section of SR 20 just south of the Oak Harbor City limits to approximately Libby Road is expected to have a LOS rating of D by the year 2003. There are no highway improvements planned for the roads in the vicinity of the MWR Marina (pers. comm., Maher, 1996).

Short-term traffic effects from demolition of the boat house and renovation of the MWR Marina would occur if the Proposed Action were implemented. These effects would be caused by construction vehicles transporting piles and dismantled boat house material away from the Seaplane Base, hauling of construction materials, and construction workers traveling to and from the job site on a daily basis during the approximately 3-month construction period. No hauling of fill or dredge material would be required. Some piles, wood, and timber from the demolished boat house would be hauled away by truck by contractors. Other materials would be transported by truck to an approved landfill.

The arrival/departure rate of trucked construction materials would vary over the construction period, as would the number of daily construction workers on site. Flaggers would guide larger vehicles into and out of the site, as well as control traffic on Tulage and Coral Sea avenues. Construction workers would likely arrive and leave during peak traffic periods (a.m. and p.m.), although typical construction activity would be spread beyond an 8-hour work period. Most workers would drive their own vehicles and park on Navy property near the Navy Exchange. Construction traffic and parking are not expected to significantly affect surrounding traffic. Some additional congestion, however, could occur at NASWI gates.

Once renovation of the MWR Marina is complete, the increased availability of moorage slips would likely increase the number of daily trips to and from the MWR Marina by MWR Marina visitors. At peak use periods (summer weekends and holidays), it is estimated that up to 10 boats would be in use, resulting in approximately 20 vehicle round trips to and from the MWR Marina. This level of use is in comparison to peak use of approximately 8 vehicle round trips currently and 12 round trips under previous conditions (prior to boat house closure in 1993). Most of the traffic would occur Thursday through Sunday. The Proposed Action would not cause a doubling of traffic volumes at any intersections, which is the standard used by DoD Military Traffic Management Command (MTMC) guidelines to determine if any roadway improvements are warranted. No significant adverse effects would occur at facilities controlled by the Washington State Department of Transportation (WSDOT) as a result of the Proposed Action.

The No Action Alternative would not affect traffic conditions, as no construction and no new operational activities would occur.

As no significant impacts are anticipated, no mitigation measures for traffic are required as part of the Proposed Action.

3.9.3 Vegetation

Terrestrial vegetation near the MWR Marina is limited to small patches of lawn between the parking lot and the boat house. No natural terrestrial vegetation occurs at the site. The subtidal areas at the MWR Marina do not support any eelgrass (*Zostera marina*) beds. There are no rare plants, or sensitive native plant communities associated with the site (Department of the Navy 1991; WDFW 1996). The coastal bluff to the south of the EOD float/main pier has been identified as a cliff that is important coastal habitat (WDFW 1996).

Construction associated with the Proposed Action may temporarily eliminate less than 0.1 acre (0.4 ha) of lawn area, but no natural vegetation. The No Action Alternative would result in the retention of the lawn vegetation.

As no significant impacts are anticipated, no mitigation measures are required as part of the Proposed Action.

3.9.4 Wetlands

The National Wetland Inventory (NWI) has identified estuarine wetlands along the shorelines to the northeast and south of the MWR Marina; no wetlands occur within the MWR Marina area. The Proposed Action would not affect wetland resources. The potential for off-site effects would be minimized by implementation of mitigation measures GSS-1 through GSS-4 described in Section 3.3.

The No Action Alternative would not affect wetland resources at the Seaplane Base.

As no significant impacts are anticipated, no mitigation measures are required as part of the Proposed Action.

3.9.5 Recreation

The existing MWR Marina is operated by the MWR Department for recreational purposes and is the only recreational boating facility at NASWI. Boat and equipment rentals and sailing classes are available to all active-duty military personnel, dependents, military retirees, and DoD civilians. The MWR Department has 17 powerboats (5 currently in the water) and 13 sailboats (5 currently in the water) available for rent. Nine additional sailboats will soon be available. Moorage for private boats, when available, is limited to use by active-duty military personnel, dependents, military retirees, and DoD civilians. A shoreside area is available for boat maintenance and repairs; however, onshore boat or equipment storage is currently very limited. There are no fueling facilities at the MWR Marina.

The City of Oak Harbor owns and operates the Oak Harbor Marina, located approximately 1,700 feet (518 m) west of the MWR Marina on the west side of the isthmus (Figure 2.1-3). The Oak Harbor Marina has a capacity of about 420 boats, and is able to accommodate boats ranging from 24 feet (7 m) to 50 feet (15 m) in both open and covered facilities (pers. comm., Davis, 1996). Public fueling and sewage disposal facilities are available at the Oak Harbor Marina.

Closure of the MWR Marina boat house in 1993 left the MWR Department able to accommodate only 11 boats at the MWR Marina and another 18 boats moored at nearby buoys in Crescent Harbor. All 11 MWR Marina slips are currently being used by the MWR Department for their rental boats, and other NASWI departments. No available shoreside moorage facilities are available for active-duty military, dependents, military retirees, and DoD civilians. The MWR Department is continually getting calls of inquiry regarding the availability of moorage space, and since the closure of the boat house, has had to refer callers to the public marinas at Oak Harbor and Anacortes (pers. comm.,

Score, 1996). These other facilities, however, are usually operating at capacity and generally have a waiting list varying from 6 months to over 15 years, depending on the size of the boat. At Oak Harbor Marina there is currently a 6-month wait for 24-foot (7.3-m) and 28-foot (9-m) slips, a 4- to 5-year wait for 36-foot (11-m) and 40-foot (12-m) slips, and about a 15-year wait for a 50-foot (15-m) boat (pers. comm., Davis, 1996).

A COE recreational small boat moorage study (COE 1980) projected that there would be 31,000 pleasure boats in the northern Puget Sound area (Skagit, Whatcom, Island, and San Juan counties) by the year 2000. Within this area, the study identified the need for a significant amount of additional pleasure boat rental moorage in summer and winter (1,668 additional boat moorage in summer and 651 in winter). The majority of this demand is for wet open moorage, as compared to other wet or dry moorage facilities. From 1987 to 2000, demand for ocean boating activities is expected to increase between 1.5% and 3.2% annually (Ocean Non-power Boating- 3.2%, Sailing- 2.6%, and Ocean Power Boating- 1.5%) (Washington IAC, 1990 and 1995). A 1978 survey of boat moorage in the northern Puget Sound area indicated a total rental moorage of 727 boats (COE 1980). This total number has not changed significantly in the past 18 years, since few new rental boat slips have been constructed during this timeframe (pers. comm., Score, 1996).

The Proposed Action would result in a total of about 60 boat slips (an increase of 38 over current slip/mooring levels), many of which would be available for rent by active-duty military personnel, dependents, military retirees, and DoD civilians. The additional slips would have a positive effect on recreation resources at NASWI and the northern Puget Sound area. Additional moorage capacity would help meet existing and future demand for pleasure boat rental moorage. Funding derived from additional moorage and boat rental would also help maintain the MWR Marina and fund other MWR activities and employment at NASWI.

The No Action Alternative would continue to have negative effects on recreation resources at NASWI and in the region. Existing and future pleasure boat moorage needs would not be met by the MWR Department.

No mitigation measures are required as part of the Proposed Action, as the effects on recreation would be positive.

3.9.6 Socioeconomics

In 1992, the permanent population of Island County's north Whidbey Island planning unit, which encompasses most of NASWI and all of the Seaplane Base, was 35,676 persons and is expected to increase by 3,800 (an annual average rate of 1.1 percent) by the year 2003 (Island County 1994). Most of the people in this area live in the City of Oak Harbor and in military housing at NASWI. As of 1995, the City of Oak Harbor population was 19,800 persons (pers. comm., Shelton, 1996). The NASWI population as of April 1996 was 5,051 (pers. comm., Shaddy-Brown, 1996).

In 1992, there were 16,203 employment opportunities in the north Whidbey Island planning unit. Employment in this region is forecasted to grow by 2,784 jobs by the year 2003 (Island County 1994). Within north Whidbey Island, most jobs are associated with government, military, retail, or service sectors, with most jobs occurring near the City of Oak Harbor.

The Proposed Action would result in a short-term increase in construction jobs of up to 15 workers, although some of the work may be conducted by current NASWI Public Works personnel. There would be no change in long-term MWR Marina employment. Renovation of the MWR Marina would provide up to 60 slips would increase MWR Department revenue. Under the existing conditions (11 slips), MWR Department revenue is inadequate to sustain the facility (pers. comm., Score, 1996).

The No Action Alternative would forego any increase in jobs related to the new construction assumed under the Proposed Action.

As any potential socioeconomic effects are expected to be beneficial, no mitigation measures are required as part of the Proposed Action.

3.9.7 Housing

There are currently 1,444 housing units available for military personnel at NASWI (pers. comm., Shaddy-Brown, 1996). This includes approximately 1,145 units at the Seaplane Base. An additional 109 housing units at Rock Hill Terrace at the Seaplane Base will become operational during 1996. Approximately 3,760 military families live off base in private housing (pers. comm., Shaddy-Brown, 1996).

The nearest military housing complexes are 0.8 mile (1.3 km) to the north (Saratoga Heights) and 0.3 mile (0.5 km) to the southwest (Elk Drive). The nearest non-military housing is located along East Pioneer Way, just off NASWI property, 0.5 mile (0.8 km) from the MWR Marina site.

Demolition, construction, and operation of the MWR Marina would not require additional military housing facilities. The Proposed Action and the No Action Alternative would not affect housing in the area.

As no significant impacts are anticipated, no mitigation measures are required as part of the Proposed Action.

3.9.8 Public Services

Public services examined in this EA include law enforcement, fire protection, emergency spill response, emergency medical, and solid waste handling.

The NASWI Security Police are responsible for all law enforcement on a 24-hour basis at NASWI. Law enforcement in the nearby City of Oak Harbor is provided by the Oak

Harbor Police Department. The North Precinct of the Island County Sheriff's Department, located at 6th and Main Street in Coupeville, is responsible for law enforcement in unincorporated portions of Island County from south of Coupeville to Deception Pass. There are 35 deputies and 1 sheriff, or approximately 0.6 officers/1,000 residents in the Island County Sheriff's Department that patrol Whidbey and Camano islands. The Washington State Patrol is responsible for the SR 20 corridor.

The proposed MWR Marina would be equipped with a manual fire alarm and chemical fire extinguishers. A radio reporting alarm system has recently been introduced in some buildings at the Seaplane Base. Fire protection and emergency medical services on Navy property would be provided by the NASWI Fire Department from a station located just west of the MWR Marina near the intersection of Coral Sea Avenue and Tulage Avenue. The Navy has an emergency vehicle located at Ault Field equipped to handle flammable liquid spills. The Navy also has a response crew at the Seaplane Base trained to contain and clean up toxic or flammable material spills in the waters surrounding NASWI. In the case of fire at the MWR Marina, the Navy may be assisted by the City of Oak Harbor and/or Island County Fire Departments. This assistance would be voluntary and is based on a County-wide Mutual Assistance Agreement (pers. comm., Biller, 1996). The nearest non-military fire station is located in City of Oak Harbor at the intersection of 400 Avenue West and 60 NW Street.

Emergency medical services are provided by NASWI emergency medical technicians and ambulatory services. A Navy hospital is located near Saratoga Street at Ault Field, approximately 4.3 miles (6.9 km) from the MWR Marina. Whidbey General Hospital, 10 miles (16 km) south of the MWR Marina in the town of Coupeville, is the nearest non-military emergency medical facility.

Solid waste management and recycling services for the MWR Marina are handled by the NASWI Public Works Department, with lunch-room and office-type waste hauled off the island to approved landfills.

Although additional slips at the MWR Marina would increase the number of visitors to the area, demand for law enforcement services would not significantly increase since the MWR Marina represents a very small portion of the activity at the Seaplane Base. A much greater level of activity occurs at the Navy Exchange, Commissary, and other facilities. Military Security Police would continue to provide these services at the MWR Marina. The Proposed Action would not significantly increase the need for community medical or emergency services, or for solid waste disposal.

The No Action Alternative would not affect the public services in the area.

Because there are no significant adverse effects, no mitigation measures are required as part of the Proposed Action.

3.9.9 Schools

The nearest schools to the MWR Marina are Skagit Valley Junior College (Whidbey Branch) along East Pioneer Way near the western boundary of NASWI, Olympic View Elementary on 70th Street NE, and Oak Harbor Elementary School on Midway Boulevard. These schools are 0.3, 1, and 1.2 miles (0.5, 1.6, and 1.9 km) from the MWR Marina, respectively. Because no additional personnel would be required to operate the renovated MWR Marina, the Proposed Action and the No Action Alternative would not affect enrollment in the Oak Harbor or other Island County schools.

As no significant impacts are anticipated, no mitigation measures are required as part of the Proposed Action.

3.9.10 Utilities

Utilities at the MWR Marina include potable water, sanitary sewer, storm sewer, and energy/communications. Private utility companies servicing the MWR Marina include Puget Sound Power and Light Company (Puget Power), Cascade Natural Gas, and GTE Telephone. Other utilities are provided by the City of Oak Harbor and the NASWI Public Works Department.

Water

An existing water supply system currently serves the MWR Marina area. Water for NASWI is supplied by the City of Oak Harbor's water supply system. The City of Oak Harbor receives its water from wells and from the City of Anacortes (Department of the Navy 1988). Water is transmitted to the Seaplane Base through a 10-inch (25-cm) diameter line from a storage tank at Ault Field. The Seaplane Base distribution grid has two 1 million gallon (4.5 million liter) tanks and 6- and 10-inch (15- and 25-cm) lines. The capacity of the system is adequate for anticipated uses at NASWI (Department of the Navy 1988).

Since water lines already serve the MWR Marina, only minor on-site waterline extensions would be required as part of the Proposed Action. Each dock would have one water faucet (pers. comm., Score, 1996). Use of machinery for demolition and construction activities may increase the risk of contamination of surface and groundwater, although the risk would be minimized through BMPs. Since no in-water boat refueling occurs at the MWR Marina (tanks can be refilled at a facility on land or at the City of Oak Harbor Marina), the risk of contamination during marina operation is minimal. Increased use of the MWR Marina may result in a minor increase in water consumption at NASWI. This increase is not expected to be significant relative to the current level of consumption at NASWI. The No Action Alternative would not affect water resources, including groundwater.

Sanitary Sewer

The Seaplane Base has a 16.8-acre (6.8-ha) sewage stabilization lagoon with a treatment capacity of 2 million gallons (9,092,180 liters) per day. The City of Oak Harbor operates this facility and provides sanitary sewer service to the Navy. An existing 4-inch (10-cm) force main serves the MWR Marina area (Department of the Navy 1988).

Since sanitary sewer lines already serve the MWR Marina, no extension would be required as part of the Proposed Action. Increased use of the MWR Marina may result in a minor increase in sewage requiring treatment. This increase would be within the system capacity and is not expected to be significant. The No Action Alternative would not affect sanitary sewer service.

Storm Sewer

An existing storm sewer system serves the MWR Marina area and outfalls to Crescent and Oak harbors. The system includes 8- and 10-inch (20- and 25-cm) gravity lines (Department of the Navy 1988).

Since storm sewer lines already serve the MWR Marina area, no extension would be required as part of the Proposed Action. The project would not significantly affect stormwater runoff since no change is proposed to existing grades that contain surface runoff and direct it to storm sewers. The marina renovation site plan (Figure 2.1-4) would be reviewed for compliance with Navy regulations.

In general, construction activities have the potential to generate a variety of pollutants such as sediment, diesel fuel, motor oil, paints, solvents, and cement. Water quality problems can arise if these pollutants are released to the environment and transported to water bodies via stormwater runoff. Demolition and construction of the MWR Marina is not likely to affect surface waters; however, control measures during construction would be implemented to minimize the potential for off-site degradation (see Section 3.4).

The No Action Alternative would not affect water resources, including groundwater.

Energy/Communications

Existing energy and communications at the MWR Marina include electricity, natural gas, and telephone. Puget Power provides electrical service to NASWI via a 12.4 to 2.4 kV Navy-owned distribution substation near Coral Sea Avenue. This 12.4 kV distribution system services the existing MWR Marina (Department of the Navy 1988). Only minor on-site extension of the electrical system would be required to provide one electrical outlet at each new boat slip as part of the Proposed Action. Security floodlights would be installed along the shore to illuminate the docks and boats, but no lights would be

installed directly on the docks or pilings (pers. comm., Score, 1996). This extension would not affect availability of electricity at NASWI or in the Oak Harbor area.

Cascade Natural Gas Company operates a natural gas distribution system at NASWI. No extension of the natural gas system would be required for the Proposed Action. Existing GTE telephone service is available at the MWR Marina and no expansion is required.

As no adverse effects associated with utilities would occur as a result of the Proposed Action, no mitigation measures are required. The No Action Alternative would not affect utilities.

4.0 CUMULATIVE AND LONG-TERM ENVIRONMENTAL EFFECTS

4.1 CUMULATIVE EFFECTS

Cumulative effects are typically defined as two or more individual effects which, when considered together, compound or increase other environmental effects. Cumulative effects can derive from the individual effects of a single project on various resources or the effects of several past, present, and/or future projects on these resources. Thus, cumulative effects can result from individually minor but collectively significant actions taken over a period of time. The existing and future projects with the greatest likelihood of contributing to cumulative effects include the existing City of Oak Harbor Marina and potential Navy improvements of the nearby main pier and EOD float. Due to the proximity of the Navy's main pier and EOD float, these potential Navy projects represent the greatest likelihood for cumulative effects. No expansion plans for the City of Oak Harbor Marina are known at this time.

No adverse effects were identified for the Proposed Action for aesthetics/visual quality, traffic and circulation, vegetation, wetlands, recreation, socioeconomics, housing, public services, schools, and utilities. Therefore, no cumulative effects are anticipated for these resource topics.

In addition, the No Action Alternative is discussed relative to cumulative effects resulting from no demolition of boat house or renovation of the MWR Marina.

4.1.1 Land and Shoreline Use

The Proposed Action would not change land use, as this project is a renovation of an existing marina and is consistent with land use plans. The renovated marina would benefit recreational boating enthusiasts in the northern Puget Sound area by satisfying a portion of the regional demand for boat moorage.

The No Action Alternative would retain the current boat moorage facilities and closed boat house but would not expand marina facilities to satisfy a portion of the regional demand for boat moorage.

4.1.2 Climate and Air Quality

The Proposed Action would have no significant cumulative air quality or climatic effects. Vehicle and boat engine emissions in the area would be expected to increase slightly; however, this increase would be insignificant. Since the only fueling of boats at the MWR Marina occurs on land, the Proposed Action would likely result in a portion of the

boats traveling around the peninsula to the City of Oak Harbor Marina to refuel. This could result in a slight increase in boat combustion engine emissions in the City of Oak Harbor. Although the number of boats moored at the MWR Marina would approximately double (increase of 25 to 35 boats) from current levels, the increase would not significantly affect air quality for the City of Oak Harbor and northern Puget Sound region.

The No Action Alternative would have no cumulative effects to climate and air quality.

4.1.3 Soils, Geology, and Sediment

The Proposed Action would result in beneficial effects to the marine sediments in the vicinity of the MWR Marina because 64 creosote pilings would be removed, reducing the risk of contamination of sediments. The potential Navy main pier improvements and EOD float expansion would cause additional adverse effects as a result of the Proposed Action, although cumulatively, they would not be significant.

The No Action Alternative could lead to risk of marine sediment contamination because of deterioration of the boat house that may cause negative cumulative effects in Crescent Harbor.

4.1.4 Hydrology and Water Quality

Temporary construction activities for the Proposed Action would temporarily increase turbidity during pile removal and installation; however, this is not expected to be significant cumulatively. The operations at the MWR Marina would not change compared to past practices although there would be approximately twice as many boats that could potentially leak fuel or other pollutants. The Proposed Action would lead to increased boat traffic at the City of Oak Harbor Marina, since no in-water fueling occurs at the MWR Marina. This could lead to increased risk of water quality impacts in Oak Harbor, although this effect is not likely to be significant. Conversely, the MWR Marina renovation would remove all mid-harbor moorage and would reduce the risk of boats being wrecked and spilling fuel during storms. Any hydrologic effects would be effectively mitigated through implementation of the mitigation measures described in this EA. Potential Navy main pier improvements and EOD float expansion near the MWR Marina would result in additional short-term effects to water quality, although cumulatively, these effects would not be significant.

The No Action Alternative would result in no removal of the boat house and its continued deterioration could result in localized contamination in Crescent Harbor by falling lead-based paint chips. Potential Navy main pier improvements and EOD float expansion could cause additional short-term effects to marine water quality, but none are expected to be significant in the long term.

4.1.5 Cultural Resources

No known on-site archeological resources would be affected by the Proposed Action. Therefore, there would be no cumulative effects. If subsurface archeological resources are uncovered during construction activities, the Washington SHPO would be consulted.

Demolition of the boat house would permanently remove a contributing historical resource from the potential Seaplane Base Historic District (Department of the Navy 1994). The preparation of HABS documentation and construction of an interpretative display would adequately mitigate for the adverse effects. The potential Navy main pier improvements and EOD float expansion would not cause any cumulative adverse effects to cultural resources.

The No Action Alternative would have no cumulative effects to archeological resources. This alternative would retain the boat house over the short term, but continued deterioration would result in the loss of the building, potentially without HABS documentation. The No Action Alternative could result in an cumulative adverse effect to historical resources at the Seaplane Base because of the eventual loss of the resource, potentially without HABS documentation.

4.1.6 Wildlife and Fishery Resources

The Proposed Action would have only short-term effects on wildlife and fisheries resources and would not have any cumulative effects. Potential main pier improvements and EOD float expansion may cause additional short-term effects to wildlife and fish; however, none are expected to be significant.

The No Action Alternative would not have any significant cumulative effects on wildlife and fisheries resources, although the proposed main pier improvements and EOD float expansion may cause additional short-term effects to wildlife and fish.

4.1.7 Noise

The Proposed Action is not expected to generate any significant noise effects as mitigation measures would be implemented to reduce short-term construction-related noise. The potential main pier improvements and the EOD float expansion would cause short-term construction-related noise effects. The MWR Marina, main pier, and EOD float projects would not be constructed at the same time and operational noise levels would be minimal.

Under the No Action Alternative, no cumulative effects on noise levels would result from the potential main pier and EOD float improvements.

4.1.8 Environmental Justice

The Proposed Action would not have a significant effect on specific minority or low income communities on Whidbey Island. Therefore, no cumulative effects would occur.

The No Action Alternative would not have a significant effect on specific minority or low income communities on Whidbey Island. Therefore, no cumulative effects would occur.

4.2 IRREVERSIBLE OR IRRETRIEVABLE COMMITMENT OF RESOURCES

Renovation of the MWR Marina and demolition of the boat house would result in an irretrievable use of energy and material, although such use is not expected to be significant. The Proposed Action would remove the boat house, a structure dating from World War II, although the HABS documentation and interpretative sign would mitigate for the loss. The renovation of the MWR Marina would increase recreational opportunities in the region.

4.3 RELATIONSHIP BETWEEN SHORT-TERM USE AND LONG-TERM PRODUCTIVITY

The Proposed Action would not significantly alter the manner in which the environment is used and would not affect the biological productivity in Crescent Harbor or northern Puget Sound. The project may result in a short-term avoidance of the area by wildlife and fish, but overall, the renovation would benefit the ecology of the site by reducing shading of the marine floor, reducing the number of creosote-treated piles in the water and eliminating harbor moorage on buoys, where boats could break loose and cause hazards. Over the long term, Crescent Harbor would continue to provide suitable habitat for all of the species that currently occur there.

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5.2 TELEPHONE COMMUNICATIONS AND LETTERS

Biller, J., Fire Chief, Island County Fire District No. 5 (Central Whidbey Fire and Rescue), Whidbey Island, Washington, April 15 and 26, 1996.

City of Oak Harbor. 1996. Letter from D. Wright, Planner, City of Oak Harbor to N. Bass, EFA NW. August 9, 1996.

Davis D. City of Oak Harbor Marina. Telephone conversation with Kevin Butterbaugh, EDAW, Inc. June 11, 1996.

DNR (Washington Department of Natural Resources). 1996. Letter from D. Lancaster to K. Kler, EFA NW. August 6, 1996.

FWS (U.S. Fish and Wildlife Service). 1996. Letter from David Fredrick, Supervisor, North Pacific Coast Ecoregion, to Ron Tressler, EDAW, Inc., June 14, 1996.

Gaar, E.H., Habitat Branch Chief, National Marine Fisheries Service, Portland, OR. Letter to Mr. Gary Braun, Tetra Tech, Inc. June 5, 1996.

Klope, Matthew, Wildlife Biologist, NASWI Environmental Affairs Department. Personal conversation with Charles Everett, EDAW, Inc., June 7 and July 11, 1996; and telephone conversation with Gary Braun, TetraTech, Inc. June 10, 1996.

Maher, James. NASWI Public Works Department. Telephone conversation with Ron Tressler, EDAW, Inc., June 3, 1996.

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OAHP (Washington State Office of Archaeology and Historic Preservation). 1995. Letter from Stephen A. Mathison, Restoration Designer, OAHP, to K. A. Souders, Director, Environmental Affairs Department, Department of the Navy, Naval Air Station Whidbey Island. August 3, 1995.

Rowe, Mike, Marina Manager, Morale, Welfare, and Recreation (MWR) Department, NASWI. Telephone conversation with Charles Everett, EDAW, Inc., May 6 and July 17, 1996.

Score, Richard, Recreation Director, Morale, Welfare, and Recreation (MWR) Department, NASWI. Telephone conversation with Charles Everett, EDAW,

Inc., May 6, and July 17, 1996; and Kevin Butterbaugh, EDAW, Inc., June 11, 1996.

Shaddy-Brown, Betty Jo, Personnel Support Branch, NASWI. Telephone conversation with Ron Tressler, EDAW, Inc., May 30, 1996; and Kevin Butterbaugh, EDAW, Inc., May 31, 1996.

Shelton, R. Planning and Community Development, City of Oak Harbor, Washington. Telephone conversation with Ron Tressler, EDAW, Inc., May 30, 1996.

Spendlove, A., Environmental Affairs Department, NASWI. Telephone conversation and FAX with Gary Braun, Tetra Tech, Inc. June 11, 1996.

Watson, James, Wildlife Biologist, Washington State Department of Fish and Wildlife. Telephone conversation with Ron Tressler, EDAW, Inc., June 11, 1996.

WDFW (Washington State Department of Fish and Wildlife). 1996. Letter from WDFW to EDAW, Inc. with information from Priority Habitat Species (PHS) Database.

6.0 LIST OF PREPARERS AND DISTRIBUTION LIST

6.1 LIST OF PREPARERS

This EA for the renovation of the MWR Marina and demolition of the boat house at Seaplane Base, NASWI, Washington, was prepared by a multi-disciplinary team managed by the Department of the Navy, Engineering Field Activity, Northwest, Poulsbo, Washington. Contributions to the EA were also made by the MWR Department, Public Works Department, and Environmental Affairs Department at NASWI, Oak Harbor, Washington. EDAW, Inc., Seattle, Washington, a consulting firm under contract to the Navy, compiled and prepared the EA document. EDAW, Inc. was assisted by Tetra Tech, Inc., Redmond, Washington. Contributions by individuals were subject to revision during product reviews and editing. The following is a list of contributors to this EA:

Department of the Navy

Kimberly Kler	Engineering Field Activity, Northwest, Project Manager, Environmental Planning & Natural Resources Dept.
Kathy Souders	NASWI, Department Head, Environmental Affairs Dept.
Matthew Klope	NASWI, Wildlife Biologist, Environmental Affairs Dept.
Richard Score	NASWI, Recreation Manager, Morale, Welfare, and Recreation Dept.
Mike Rowe	NASWI, MWR Marina Manager, Morale, Welfare, and Recreation Dept.

EDAW, Inc.

Jill Sterrett	Navy Contract Manager, AICP
Charles Everett	Co-Project Manager, Environmental Planner
Ron Tressler	Co-Project Manager, Biologist
Kent Whitehead	Planner/Cultural Resource Specialist
Kevin Butterbaugh	Environmental Planner
Peter Carr	Editor

Amy Baker Graphics Technician/Word Processing
Jody Burroughs Word Processing
Jon Walton AutoCAD Specialist

Tetra Tech, Inc.

Steve Ellis Senior Biologist
Gary Braun Water Quality/Sediment Transport Specialist

6.2 DISTRIBUTION LIST

The following is the distribution list for this EA:

Federal Elected Officials

U.S. Senator Slade Gorton
U.S. Senator Patty Murray
U.S. Representative Jack Metcalf

State Elected Officials

State Senator Mary Haugen
State Representative Barry Sehlin
State Representative Barney Beeksma

Federal Agencies

U.S. Environmental Protection Agency
Defense Technical Information Center
Advisory Council on Historic Preservation
U.S. Fish and Wildlife Service
National Park Service
National Marine Fisheries Service

Washington State Agencies

Washington State Office of Archaeology and Historic Preservation/SHPO
Washington State Department of Ecology
Washington State Department of Fish and Wildlife
Washington State Department of Natural Resources

Local Agencies

Island County Planning Department
City of Oak Harbor, Planning Department

Other Organizations, Districts, and Agencies

Oak Harbor Library
Coupeville Library
Swinomish Tribal Community
Samish Tribal Nation

APPENDIX A

CORRESPONDENCE

May 9, 1996

Dr. Stephanie Toothman
 Chief of Division of Cultural Resources
 National Park Service
 Columbia Cascades Cluster Systems Support Office
 909 1st Avenue
 Seattle, WA 98104-1060

Landscape Architecture
 Planning
 Urban Design
 Environmental Analysis
 Site Engineering
 Graphic Design

Dear Dr. Toothman:

The Department of the Navy (Navy) plans to demolish Building 19, the Old Boathouse, at Naval Air Station Whidbey Island (NASWI), Island County, Washington to alleviate a public safety risk and to construct a new marina capable of meeting the Navy's current needs. Three years ago, the building was found to be unsafe and was vacated. Building 19 has been determined to be eligible for inclusion in the National Register of Historic Places as a contributing building to the Seaplane Base Historic District, although neither the building nor the district have been officially listed in the National Register (see Attachment 1).

EDAW, Inc.
 1505 Western Avenue
 Suite 601
 Seattle, WA 98101
 206 622-1176
 FAX 206 343-9809

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, the Navy has consulted with the Washington State Historic Preservation Officer (SHPO) regarding this undertaking. The Navy and the SHPO have developed a Memorandum of Agreement (MOA) that calls for the completion of an Historic American Buildings Survey (HABS) report for Building 19 prior to its demolition (see Attachment 2). The Navy has contracted with EDAW for the preparation of the HABS documentation, in conjunction with the preparation of an Environmental Assessment in compliance with the National Environmental Policy Act (NEPA).

The Navy requests a determination from your office regarding the level of HABS documentation for this resource. We have attached copies of some photos of the building as well as the Washington Historic Property Inventory Form for the Seaplane Base Historic District and Building 19 (Attachment 3). Since this building is a contributing building to a larger district documentation on an Architectural Data Form as outlined in the Guidelines for Preparing Written Historical and Descriptive Data seems appropriate. Original plans for the building are available for inclusion in the HABS report.

Thank you for your quick attention to this matter. We would like to begin the HABS report immediately following your determination. If you have any questions, please contact Chuck Everett or Kent Whitehead at (206) 622-1176.

Sincerely,

EDAW, Inc.
 Kent Whitehead
 Cultural Resources Specialist

cc: ✓ Kimberly Kler, EFA Northwest
 Matthew Klope, NASWI

Attachments 1, 2, 3

San Francisco
 Alexandria
 Atlanta
 Denver/Fort Collins
 Huntsville
 Irvine
 Seattle
 London
 Glasgow
 Colmar
 Sydney



United States Department of the Interior

NATIONAL PARK SERVICE
Columbia Cascades System Support Office
909 First Avenue
Seattle, Washington 98104-1060

IN REPLY REFER TO:
H38 (CCC-CR)

May 10, 1996

Kent Whitehead
Cultural Resources Specialist
EDAW, Inc.
1505 Western Avenue
Suite 601
Seattle, WA 98101

MAY 13 1996
KW

Re: Historic American Buildings Survey Documentation of the Old
Boathouse, Building 19, Naval Air Station, Whidbey Island, Island
County, Washington

Dear Mr. Whitehead:

Thank you for your inquiry to the National Park Service concerning Historic American Buildings Survey (HABS) documentation of the above property. The documentation outlined below will be sufficient for compliance with the Memorandum of Agreement between the Naval Air Station, Whidbey Island, the Washington State Historic Preservation Office and the Advisory Council on Historic Preservation. All documentation must be prepared in accordance with the Historic American Buildings Survey standards and guidelines, of which you already have copies.

The boathouse shall be documented as follows:

1. Large format (4" x 5" or larger negative size) photographs showing the boathouse in its setting as well as details of its architectural features, which shall be processed for archival permanence in accordance with the enclosed photographic specifications. Views shall include:

- general views showing the boathouse in its setting, including views from land and from the water
- exterior elevation views of all elevations of Building 19
- detail views of exterior architectural features, such as the pilings, typical windows, etc.
- interior views showing interior spaces and any significant historic features
- current aerial view showing Building 19 in relationship to the rest of the Seaplane Base Historic District.

2. Written historical and descriptive report shall be completed following the enclosed instructions for the "Outline Format" (p.17-25). The information in Part IB., Historical Information: Historical context, should provide a succinct statement on the significance of the Seaplane Base Historic District, as well as the significance of the Old Boathouse. A scaled sketch plan of the historic district showing the location of Building 19, on 8-1/2" x 11" paper, should also be included in the report.

3. Photographic copies of original plans and contemporary CAD drawings should be archivally processed in accordance with the enclosed photographic specifications.

A copy of the draft documentation (including one set of all photographic prints and the draft written report) should be mailed to this office for review prior to transmitting the final documentation. We will return the draft documentation with our comments, the HABS project numbers, and instructions and archival supplies for preparing the final documentation for submission. The final documentation package will include three sets of photographic prints, the negatives, and three copies of the report and photographic copies of plans and CAD drawings. The original documents will be entered in the HABS collection at the Library of Congress; copies (including photographs) will be provided to the State Historic Preservation Officer.

If you have any questions regarding HABS documentation, please contact Gretchen Luxenberg, Historian, at (206) 220-4138 or me at (206) 220-4139.

Sincerely,



Stephanie Toothman, Ph.D.
Cultural Resources

Enclosures

cc: David Hansen, WA SHPO



United States Department of the Interior

NATIONAL PARK SERVICE
Columbia Cascades System Support Office
909 First Avenue
Seattle, Washington 98104-1060

IN REPLY REFER TO:

H4217(CCSO-CR)

AUG - 2 1996

Mr. Neil Bass
Director, Environmental Planning
and Natural Resource Division
Department of the Navy
19917 7th Avenue N.E.
Poulsbo, Washington 98370-7570

RE: Preliminary Environmental Assessment (EA)Review
MWR Marina Renovation at Seaplane Base NASWI
Attn: Mrs. Kimberly Kler (Code 232KK)

Dear Mr. Bass:

Thank you for the opportunity to review the Preliminary Environmental Assessment for the above referenced project.

The documentation provided confirms that your office has satisfactorily entered into the section 106 consultation process with the Washington State Historic Preservation Office to identify eligible properties and mitigate the projects' effects. Completion of the requirements of the Memorandum of Agreement will meet any concerns this office might have about this project regarding its impact on cultural resources.

Sincerely,

A handwritten signature in black ink that reads "Stephanie Toothman".

Stephanie Toothman, Ph.D
Team Leader, Cultural Resources

EDAW

May 10, 1996

Mr. Jim Michaels
U.S. Fish and Wildlife Service
3074 Griffin Lane, Suite 102
Olympia, WA 98501

Landscape Architecture
Planning
Urban Design
Environmental Analysis
Site Engineering
Graphic Design

RE: Naval Air Station Whidbey Island Marina Improvement Project

Dear Mr. Michaels:

EDAW, Inc. has been contracted by the Department of the Navy to prepare an Environmental Assessment for the proposed marina improvement project at the Seaplane Base at Naval Air Station Whidbey Island. The project is located in T 32 N, R 1 E, Section 1. The location is indicated on the attached map.

EDAW, Inc.
1505 Western Avenue
Suite 601
Seattle, WA 98101
206 622-1176
FAX 206 343-9809

We would like to receive a list of threatened, endangered, proposed and candidate plant and wildlife species that potentially occur within 1 mile of the proposed project. If you have any questions regarding this request, please call me at (206) 622-1176. Thank you.

Very truly yours,

EDAW, Inc.

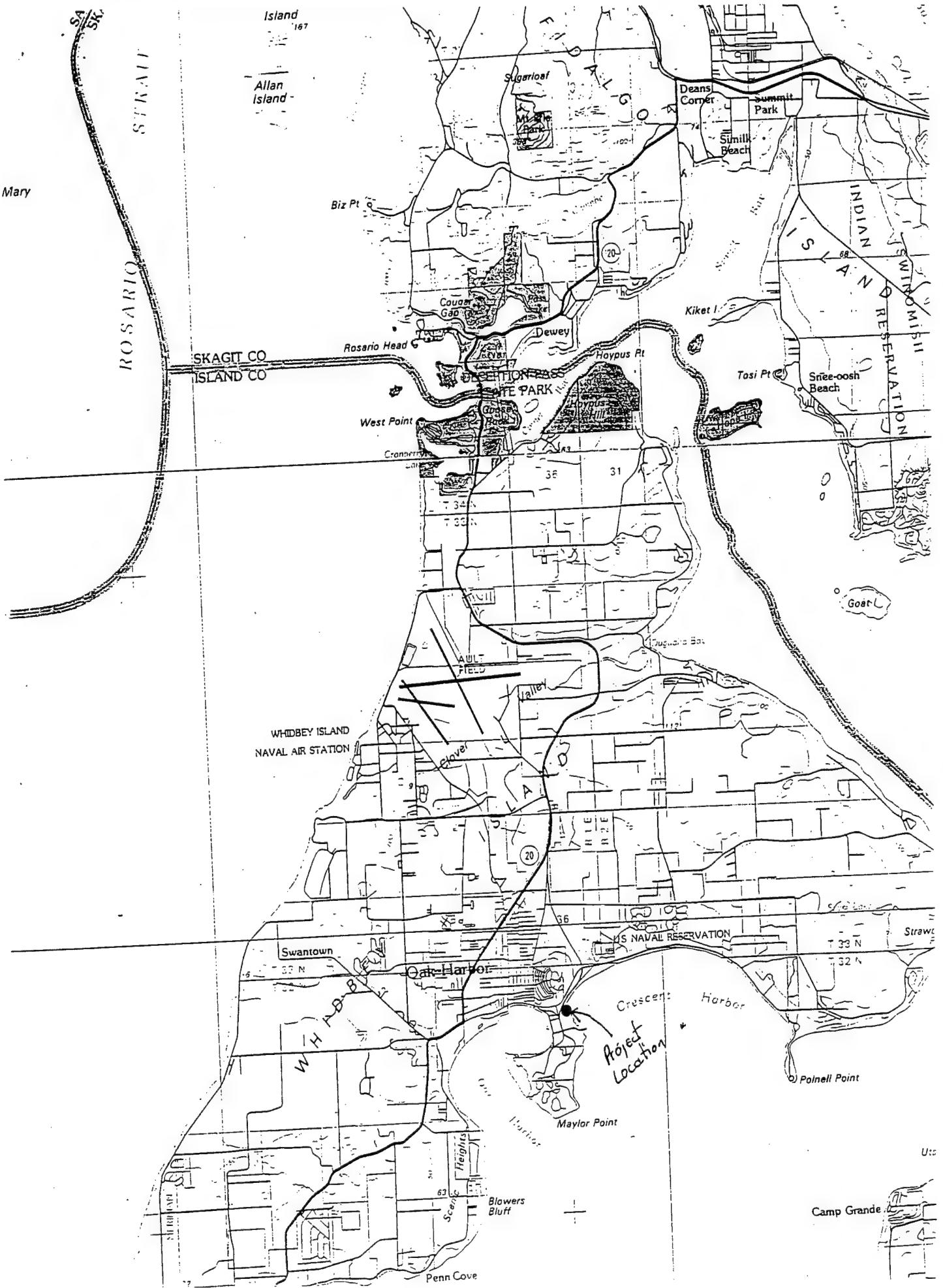


Ron Tressler
Associate

cc: C. Everett

Enclosure

San Francisco
Alexandria
Atlanta
Denver/Fort Collins
Huntsville
Irvine
Seattle
London
Glasgow
Colmar
Sydney





United States Department of the Interior

FISH AND WILDLIFE SERVICE

North Pacific Coast Ecoregion
Western Washington Office
3704 Griffin Lane SE, Suite 102
Olympia, Washington 98501
(360)753-9440 Fax: (360)753-9008

JUN 18 1996
RJ

June 14, 1996

Ron Tressler
EDAW, Inc.
1505 Western Avenue, Suite 601
Seattle, Washington 98101

FWS Reference: 1-3-96-SP-305

Dear Mr. Tressler:

This is in response to your letter dated May 10, 1996, and received in this office on May 14. Enclosed is a list of proposed and listed threatened and endangered species, candidate species and species of concern that may be present within the area of the proposed Naval Air Station Whidbey Island Marina Improvement Project in Island County, Washington. The list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act of 1973, as amended (Act). This list reflects changes to the candidate species list published February 28, 1996, in the Federal Register (Vol. 61 No. 40, 7596) and the addition of "species of concern" prepared by the Service's Western Washington Office. We have also enclosed a copy of the requirements for U.S. Navy (Navy) compliance under the Act (Attachment B).

Should the Biological Assessment (BA) determine that a listed species is likely to be affected (adversely or beneficially) by a project, the Navy should request section 7 consultation through this office. If the BA determines that a proposed action is "not likely to adversely affect" a listed species, the Navy should request Service concurrence with that determination through the informal consultation process. Even if the BA shows a "no effect" situation, we would appreciate receiving a copy for our information.

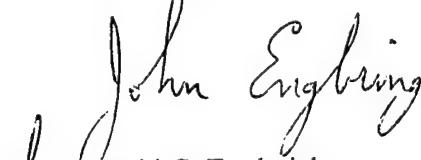
Candidate species are those species for which the Service has sufficient information to propose for listing as threatened or endangered under the Act. Species of concern (many of the former Category 1 and Category 2 candidates) are those species whose conservation standing is of concern to the Service, but for which status information is still needed. Conservation measures for species of concern and candidate species are voluntary but recommended. Protection provided to these species now may preclude possible listing in the future.

In addition, please be advised that federal and state regulations may require permits in areas where wetlands are identified. You should contact the U.S. Army Corps of Engineers for Federal permit requirements and the Washington State Department of Ecology for State permit requirements.

There may be other federally listed species that may occur in the vicinity of your project which are under the jurisdiction of the National Marine Fisheries Service (NMFS). Please contact NMFS at (503) 230-5430 to request a species list.

Your interest in endangered species is appreciated. If you have additional questions regarding your responsibilities under the Act, please contact Chandra Madrona at (360) 753-7762 or Jim Michaels of this office at the letterhead phone/address.

Sincerely,



John Engbring

David C. Frederick
Supervisor

cm/jkp

Enclosures

SE/Navy/1-3-96-SP-305/Island

c: Navy, Poulsbo, WA
WDFW, Region 4
WNHP, Olympia

ATTACHMENT A

**LISTED ENDANGERED AND THREATENED SPECIES,
CANDIDATE SPECIES AND SPECIES OF CONCERN
WHICH MAY OCCUR WITHIN THE VICINITY OF THE PROPOSED
NAVAL AIR STATION WHIDBEY ISLAND MARINA IMPROVEMENT PROJECT
IN ISLAND COUNTY, WASHINGTON
FWS REF: 1-3-96-SP-305**

(T32N R01E S01)

LISTED

Bald eagle (*Haliaeetus leucocephalus*) - wintering bald eagles may occur in the vicinity of the project from about October 31 through March 31.

Marbled murrelet (*Brachyramphus marmoratus marmoratus*) - murrelets may occur in the vicinity of the project.

Peregrine falcon (*Falco peregrinus*) - spring and fall migrant falcons may occur in the vicinity of the project.

Major concerns that should be addressed in your Biological Assessment of project impacts to listed species are:

1. Level of use of the project area by listed species.
2. Effect of the project on listed species' primary food stocks, prey species, and foraging areas, in addition to roosting, nesting, and dispersal habitat for applicable species in all areas influenced by the project.
3. Impacts from project construction and implementation (e.g., increased noise levels, increased human activity and/or access, loss or degradation of habitat) which may result in disturbance to listed species and/or their avoidance of the project area.

DESIGNATED/PROPOSED/CANDIDATE

None

ATTACHMENT A (CONTINUED)

SPECIES OF CONCERN

The following species of concern may occur in the vicinity of the project:

Long-eared myotis (*Myotis evotis*)

Long-legged myotis (*Myotis volans*)

Pacific western big-eared bat (*Corynorhinus (=Plecotus) townsendii townsendii*)

Pacific lamprey (*Lampetra tridentata*)

River lamprey (*Lampetra ayresi*)

ATTACHMENT B

FEDERAL AGENCIES' RESPONSIBILITIES UNDER SECTIONS 7(a) AND 7(C)
OF THE ENDANGERED SPECIES ACT OF 1973, AS AMENDED

SECTION 7(a) - Consultation/Conference

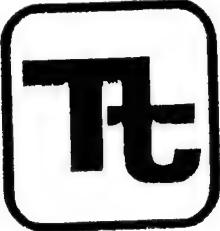
- Requires:
1. Federal agencies to utilize their authorities to carry out programs to conserve endangered and threatened species;
 2. Consultation with FWS when a federal action may affect a listed endangered or threatened species to ensure that any action authorized, funded, or carried out by a federal agency is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. The process is initiated by the federal agency after it has determined if its action may affect (adversely or beneficially) a listed species; and
 3. Conference with FWS when a federal action is likely to jeopardize the continued existence of a proposed species or result in destruction or an adverse modification of proposed critical habitat.

SECTION 7(c) - Biological Assessment for Construction Projects *

Requires federal agencies or their designees to prepare a Biological Assessment (BA) for construction projects only. The purpose of the BA is to identify any proposed and/or listed species which is/are likely to be affected by a construction project. The process is initiated by a federal agency in requesting a list of proposed and listed threatened and endangered species (list attached). The BA should be completed within 180 days after its initiation (or within such a time period as is mutually agreeable). If the BA is not initiated within 90 days of receipt of the species list, please verify the accuracy of the list with our Service. No irreversible commitment of resources is to be made during the BA process which would result in violation of the requirements under Section 7(a) of the Act. Planning, design, and administrative actions may be taken; however, no construction may begin.

To complete the BA, your agency or its designee should: (1) conduct an onsite inspection of the area to be affected by the proposal, which may include a detailed survey of the area to determine if the species is present and whether suitable habitat exists for either expanding the existing population or potential reintroduction of the species; (2) review literature and scientific data to determine species distribution, habitat needs, and other biological requirements; (3) interview experts including those within the FWS, National Marine Fisheries Service, state conservation department, universities, and others who may have data not yet published in scientific literature; (4) review and analyze the effects of the proposal on the species in terms of individuals and populations, including consideration of cumulative effects of the proposal on the species and its habitat; (5) analyze alternative actions that may provide conservation measures; and (6) prepare a report documenting the results, including a discussion of study methods used, any problems encountered, and other relevant information. Upon completion, the report should be forwarded to our Endangered Species Division, 3704 Griffin Lane SE, Suite 102, Olympia, WA 98501-2192.

* "Construction project" means any major federal action which significantly affects the quality of the human environment (requiring an EIS), designed primarily to result in the building or erection of human-made structures such as dams, buildings, roads, pipelines, channels, and the like. This includes federal action such as permits, grants, licenses, or other forms of federal authorization or approval which may result in construction.



TETRA TECH, INC.
15400 NE 90th Street, Suite 100
Redmond, Washington 98052-3521
Telephone (206) 883-1912
FAX (206) 881-6997

May 24, 1996

National Marine Fisheries Service
Environmental and Technical Services Division, Habitat Branch

ATTN: Mr. Ben Meyer
525 NE Oregon Street, Suite 500
Portland, Oregon 97232

SUBJECT: Threatened and Endangered Species List

Dear Mr. Meyer:

Tetra Tech is under contract to the U.S. Navy Engineering Field Activity Northwest to provide technical services in support of preparation of an Environmental Assessment being prepared in anticipation of construction activities to be carried out at the Seaplane Base Marina, NAS Whidbey Island, located on Whidbey Island near Oak Harbor, Washington.

Please send to us the list of Threatened and Endangered Species that may occur in this area so that we may properly address the potential impacts of the proposed project on the biological environment.

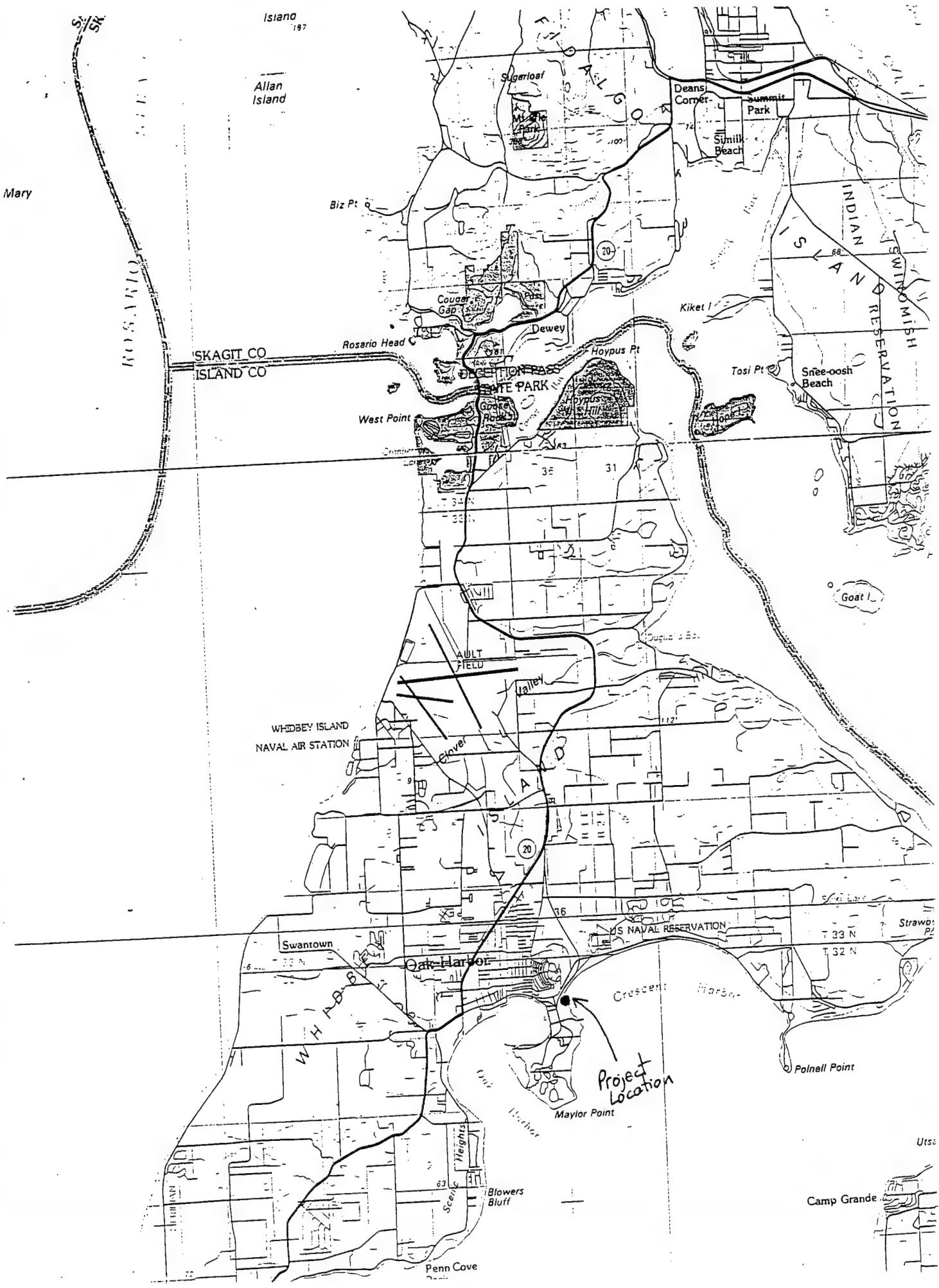
If you have any questions please contact the undersigned at (206) 883-1912.

Sincerely yours,

A handwritten signature in black ink that appears to read "Gary M. Braun".

Gary M. Braun
Senior Scientist

cc: K. Kler, EFA-NW
C. Everett, EDAW





UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
ENVIRONMENTAL & TECHNICAL SERVICES DIVISION
525 NE Oregon Street
PORTLAND, OREGON 97232-2737

JUN 5 1996

F/NW03

Mr. Gary M. Braun
Tetra Tech, Inc.
15400 NE 90th Street, Suite 100
Redmond, Washington 98052-3521

Re: Species List Request for Construction Activities at Whidbey Island near Oak Harbor, Washington

Dear Mr. Braun:

The National Marine Fisheries Service (NMFS) has reviewed your May 24, 1996, letter to Ben Meyer requesting a list of threatened and endangered species for construction activities at Whidbey Island near Oak Harbor, Washington.

We have enclosed lists of those anadromous fish species that are listed as threatened or endangered under the Endangered Species Act (ESA), those that are proposed for listing, and those that are candidates for listing. This inventory includes only anadromous species under NMFS' jurisdiction that occur in the Pacific Northwest. The U.S. Fish and Wildlife Service should be contacted regarding the presence of species falling under its jurisdiction.

Available information indicates that no listed Snake River salmon are in the project area or immediately downstream from it. The final critical habitat designated for the listed salmon (December 28, 1993, 58 FR 68453) does not include the proposed project area. Also, none of the proposed species are in the project area.

All of the anadromous fish species that are presently candidates for listing under the ESA are known to be present in the proposed action area; these species are the chum salmon (*Oncorhynchus keta*), chinook salmon (*O. tshawytscha*), coho salmon (*O. kisutch*), steelhead (*O. mykiss*), sockeye salmon (*O. nerka*), pink salmon (*O. gorbuscha*) and sea-run cutthroat trout (*O. clarki clarki*). It is important to note that candidates for listing have no status under the ESA. Once a candidate is proposed for listing, or is listed, a conference or consultation may be required.

Other threatened and endangered species under NMFS' jurisdiction that could be present in the project vicinity are the steller sea lion (*Eumetopias jubatus*), the humpback whale (*Megaptera novaeangliae*), and leatherback sea turtle (*Dermochelys coriacea*). A list of threatened and endangered marine mammals and sea



turtles that occur in Puget Sound is also enclosed.

This letter constitutes the required notification of the presence of any Federally listed threatened or endangered species or critical habitat under NMFS' jurisdiction in the permit area that may be affected by the proposed project (Appendix A to Part 330, Section C.13(5)(i)).

If you have any further questions, please contact Ben Meyer of my staff at (503) 230-5425.

Sincerely,



Elizabeth Holmes Gaar
Habitat Branch Chief

Enclosure

cc: F/NWO Brent Norberg

ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES
UNDER NATIONAL MARINE FISHERIES SERVICE JURISDICTION
THAT OCCUR IN THE PACIFIC NORTHWEST

Listed Species

Snake River Sockeye Salmon	<i>Oncorhynchus nerka</i>
Snake River Fall Chinook Salmon	<i>Oncorhynchus tshawytscha</i>
Snake River Spring/Summer Chinook Salmon	<i>Oncorhynchus tshawytscha</i>

Proposed for Listing

Umpqua River Sea-run Cutthroat Trout	<i>Oncorhynchus clarki clarki</i>
Klamath Mountains Province Steelhead	<i>Oncorhynchus mykiss</i>
Central California Coastal Coho Salmon	<i>Oncorhynchus kisutch</i>
S. Oregon/N. California Coho Salmon	<i>Oncorhynchus kisutch</i>
Oregon Coastal Coho Salmon	<i>Oncorhynchus kisutch</i>

Candidates for Listing

(all Northwest stocks of the following except coho)

Chinook Salmon	<i>Oncorhynchus tshawytscha</i>
Pink Salmon	<i>Oncorhynchus gorbuscha</i>
Chum Salmon	<i>Oncorhynchus keta</i>
Sockeye Salmon	<i>Oncorhynchus nerka</i>
Sea-run Cutthroat Trout	<i>Oncorhynchus clarki clarki</i>
Steelhead	<i>Oncorhynchus mykiss</i>
Lower Columbia River/SW Washington Coastal Coho Salmon	<i>Oncorhynchus kisutch</i>
Puget Sound/Strait of Georgia Coastal Coho Salmon	<i>Oncorhynchus kisutch</i>



WASHINGTON STATE DEPARTMENT OF
Natural Resources

JENNIFER M. BELCHER
Commissioner of Public Lands
KALEEN COTTINGHAM
Supervisor

August 6, 1996

Kimberly Kler
Project Manager
Department of the Navy
Engineering Field Activity, Northwest
Environmental Planning & Natural Resources Dept.
Naval Facilities Engineering Command
19917 7th Ave. N. E.
Poulsbo, Wa. 98370-7570

Re: Preliminary Environmental Assessment MWR Marina Renovation at Seaplane Base, NASWI

Dear Ms. Kler:

I am in receipt of the above referenced document that outlines a proposal to renovate the Navy's marina at NASWI, Oak Harbor.

As you may be aware, the Washington Department of Natural Resources (WDNR) is charged with administering the management of State-owned Aquatic Lands (SOAL) under the Washington State Constitution. This project may have the potential to impact SOAL in the vicinity and may require an aquatic use authorization with the WDNR. The potential area impacted is dependant upon what depths of water and what, if any, ownership of the tidelands are involved.

Please allow me to elaborate on the importance of various tidal elevations as they relate to the ownership of tidelands in Washington State. Washington State is a non-riparian state, which means that at Statehood the state asserted ownership to all tide and bed lands of navigable waters in the State. The following is a short description of how these lands were dealt with prior to and after statehood:

Prior to statehood, November 11, 1889, the U. S. Government did not sell tidelands per se, rather, lands adjoining navigable waters were sold as government lots and are referred to as pre-statehood patents. The following is usually held to apply when patent lands adjoining navigable waters were sold:

Where patents were issued by the United States prior to statehood, if the waters are navigable, the boundary is the line of ordinary high tide, high water, or the meander line whichever is farther waterward. Where patents were issued after statehood, the boundary is the line of ordinary high tide or high water.

After statehood the following tidal elevations were used to convey ownership when tidelands were sold by the State of Washington:

- November 11, 1889 to November 9, 1911, ownership was generally granted to the line of Mean Low Tide;
- November 10, 1911 to August 9, 1971, ownership was generally granted to the line of Extreme Low Tide;
- Tidelands were withdrawn from sale by the State on August 9, 1971.
- Bedlands, below Extreme Low Tide were not sold, however, some exceptions were made to the Federal Government in certain locations and bedland deeds were conveyed.

Therefore, any activities that propose to occupy the tide or bedlands below the elevations described , depending on ownership, may be occurring on SOAL and would require a use authorization document from the WDNR.

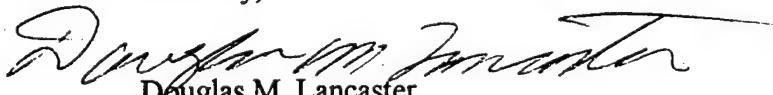
During my initial ownership review of the area in question it came to my attention that the Navy has deed to the tidelands in this location. This deed is an exception to the above generalities, and grants rights out to **minus four fathoms below mean low tide**, which equates to approximately -21.2 feet (tidal benchmark information attached).

However, in reviewing the Preliminary Environmental Assessment, I could not locate any information relating to water depths at this location and as you can gather from the foregoing discussion this data is needed to make a determination as to whether or not a use authorization may be required from the WDNR. Could you please provide any data that you have regarding this issue to me at the address below:

Department of Natural Resources
Northwest Region
919 N. Township
Sedro-Woolley, WA 98284
Attn: Doug Lancaster

Thank you for your cooperation in the above matters.

Sincerely,


Douglas M. Lancaster
Land Manager
Northwest Region

attachments

944-7952

7/16/69

WASHINGTON - 103

U. S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

TIDAL BENCH MARKS

Crescent Harbor, Whidbey Island
Lat. 48° 17'.1; Long. 122° 37'.3

BENCH MARK 1 (1951) is a standard disk, stamped "NO 1 1951", set in top of concrete-filled, bollard projecting about 2 feet above ground, on rock-filled approach to Navy finger pier at west side of Crescent Harbor, 75 feet west of west end of Naval Air Station pier. It is about 56½ feet west of northwest corner of fuel valve shack No. 347, 51 feet northwest of and across road from northwest corner of 7-foot by 13-foot concrete waterdrain basin, 25½ feet north of centerline of road, and 25 feet south of high waterline. Elevation: 18.95 feet above mean lower low water.

BENCH MARK 2 (1951) is a standard disk, stamped "NO 2 1951", set in top of concrete-filled, bollard projecting about 2 feet above ground, on rock-filled approach to Navy finger pier 76 feet west of west end of Naval Air Station pier. It is about 31½ feet west of northwest corner of 7-foot by 13-foot concrete water-drain basin, 26½ feet south of centerline of road, and 25 feet south of high waterline. Elevation: 18.91 feet above mean lower low water.

BENCH MARK 3 (1951) is a standard disk, stamped "NO 3 1951", set in top of southeast corner of concrete base of diesel fuel oil station No. 306 at Naval Air Station, about 110 feet west of rock-filled approach to Naval Air station pier. It is about 122 feet south of centerline of Tulagi Avenue, 17 feet north of northeast corner of 5-foot square concrete manhole with steel plate cover, and about level with avenue. Elevation: 18.36 feet above mean lower low water.

BENCH MARK 4 (1951) is a standard disk, stamped "NO 4 1951", set in top of southeast corner of concrete wall of sewage clarifier (settling basin) at sewage disposal plant at Naval Air Station, 60 feet west of rock-filled approach to Naval Air Station pier. It is about 25 feet east of southeast corner of building No. 47, 16½ feet northwest of centerline of gravelled road and center of gate across road, 4½ feet north of 6-foot high mesh-wire fence, and about level with avenue. Elevation: 17.21 feet above mean lower low water.

(OVER)

USCOMM-CGS-DC

Crescent Harbor, Whidbey (cont'd)

BENCH MARK 9 (NAS), is a Naval Air Station Public Works, 2-inch bronze disk, stamped "9", set in top of concrete post in 6-inch steel casing, flush with and at center of intersection of Coral Sea Avenue and Tulagi Avenue. It is approximately 450 yards west of west end of rock-filled approach to large finger pier, 86½ feet east of southeast corner of building No. 20, 66 feet northeast of northeast corner of building No. 21, and 51 feet northwest of northwest corner of 6-inch high concrete foundation for fuel pump (station) No. 314. Elevation: 20.99 feet above mean lower low water.

Mean lower low water at Crescent Harbor, Whidbey Island is based on 2 months of records, January - February 1953, reduced to mean values. Elevations of other tide planes referred to this datum are as follows:

	<u>Feet</u>
Mean higher high water	11.40
Mean high water	10.60
Mean tide level	6.70
Mean low water	2.80
Mean lower low water	0.00

The estimated highest water level to the nearest half foot is 14½ feet above mean lower low water. The estimated lowest water level to the nearest half foot is 4½ feet below mean lower low water.



STATE OF WASHINGTON

DEPARTMENT OF COMMUNITY, TRADE AND ECONOMIC DEVELOPMENT

OFFICE OF ARCHAEOLOGY AND HISTORIC PRESERVATION

111 21st Avenue S.W. • P.O. Box 48343 • Olympia, Washington 98504-8343 • (360) 753-4011

August 8, 1996

Mr. Neil Bass, Director
Environmental Planning and Natural Resource Division
Department of the Navy
Engineering Field Activity Northwest
Naval Facilities Engineering Command
19917 Seventh Avenue Northeast
Poulsbo, Washington 98370-7570

Log: 073196-23-USN
Re: NASWI, Seaplane Base, Bldg. 19:
MWR Department Marina, Prelim.
Environmental Assessment (EA)

Dear Mr. Bass:

Thank you for giving us the opportunity to review the above referenced EA which includes as part of the preferred alternative, the demolition of Building 19, the Seaplane Base Boathouse.

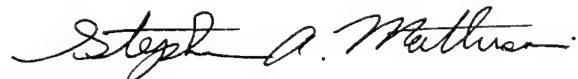
Retention and rehabilitation of the historic boathouse would certainly have been our preferred choice of options. Rehabilitation alternatives were, however, considered infeasible by the Navy because of safety concerns and prohibitive costs. The State Historic Preservation Officer then agreed to sign a Memorandum of Agreement (MOA) which stipulates Historic American Buildings Survey (HABS) documentation before demolition and erection of an interpretive display at the site.

Mr. Bass
August 8, 1996
Page Two

We have yet to see a fully signed copy of the MOA (including Advisory Council Signature) or a copy of HABS documentation, but as long as both of these actions are satisfactorily concluded, it appears that Section 106 requirements will have been fulfilled.

Again, we look forward to receiving a copy of the HABS documentation. If I may be of any assistance, please contact me at (360)753-7436.

Sincerely,



Stephen A. Mathison
Restoration Designer

SAM:tjt

cc: K. A. Souders,



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

P.O. Box 47600 • Olympia, Washington 98504-7600 • (206) 407-6000 • TDD Only (Hearing Impaired) (206) 407-6006

August 9, 1996

Ms. Kimberly Kler
Code 232KK
Dept of the Navy
19917 7th Ave NE
Poulsbo WA 98370-7570

Dear Ms. Kler:

Thank you for the opportunity to comment on the preliminary environmental assessment (EA) for the MWR Marina Restoration, Naval Air Station, Whidbey Island. We have reviewed the document and have the following comments.

The Navy should contact Ms. Mary Kautz with our Northwest Regional Water Quality Staff at (206) 649-7036 to determine whether a permit for the temporary modification to water quality standards will be required by Ecology.

If you have any questions, please call Ms. Vernice Santee with our Permit Coordination Unit at (360) 407-6926.

Sincerely,

Barbara J. Ritchie
Barbara J. Ritchie
Environmental Review Section

BJR:ri
96-5137

cc: Mary Kautz, NWRO
Vernice Santee, CP

May 10, 1996

Ms. Harriet Allen
Washington Department of Fish and Wildlife
600 Capitol Way North
Olympia, WA 98501-1091

Landscape Architecture
Planning
Urban Design
Environmental Analysis
Site Engineering
Graphic Design

RE: Naval Air Station Whidbey Island Marina Improvement Project

Dear Ms. Allen:

EDAW, Inc. has been contracted by the Department of the Navy to prepare an Environmental Assessment for the proposed marina improvement project at the Seaplane Base at Naval Air Station Whidbey Island. The project is located in T 32 N, R 1 E, Section 1. The location is indicated on the attached map.

EDAW, Inc.
1505 Western Avenue
Suite 601
Seattle, WA 98101
206 622-1176
FAX 206 343-9809

We would like to receive a list of rare, threatened, or endangered plant and wildlife species that potentially occur within 1 mile of the proposed project. If you have any questions regarding this request, please call me at (206) 622-1176. Thank you.

Very truly yours,

EDAW, Inc.



Ron Tressler
Associate

cc: C. Everett

Enclosure

San Francisco
Alexandria
Atlanta
Denver/Fort Collins
Huntsville
Irvine
Seattle
London
Glasgow
Colmar
Sydney



State of Washington
DEPARTMENT OF FISH AND WILDLIFE

Mailing Address: 600 Capitol Way N, Olympia, WA 98501-1091 - (360) 902-2200; TDD (360) 902-2207
Main Office Location: Natural Resources Building, 1111 Washington Street SE, Olympia, WA

Date: *May 22, 1994*

Dear Data Requester:

Enclosed is the information you requested from the Washington Department of Fish and Wildlife (WDFW) concerning the agency's *priority habitats and species*. This package may also contain documentation to help you understand and use these data.

This information only includes data that WDFW maintains in a centralized data system. It is not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife. Nor is it designed to provide you with guidance on interpreting this information and determining how to proceed in consideration of fish and wildlife. This data only documents the location of important fish and wildlife resources to the best of our knowledge. It is important to note that *priority habitats or species* may occur on the ground in areas not currently known to WDFW biologists, or in areas for which comprehensive surveys have not been conducted. Site-specific surveys are frequently necessary to rule out the presence of *priority habitats or species*.

Your project may require further field inspection or you may need to contact our field biologists or others in WDFW to assist you in interpreting and applying these data. Refer to the enclosed directory and regional map for those contacts. Generally, for assistance on a specific project, you should contact the appropriate WDFW regional office and ask for the area habitat biologist for your project area.

Please note that locational data for Spotted Owls is not routinely displayed on the standard maps. They are however, listed in the tabular reports that accompany the 1:24,000 scale maps.

WDFW periodically updates this information as additional data become available. Because fish and wildlife species are mobile and because *priority habitats and species* data is dynamic, project reviews for fish and wildlife should not rest solely on mapped information. Instead, they should also consider new data gained in current field investigations. Remember, *priority habitats and species* data can only show that a species or habitat type is present, they cannot show that a species or habitat type is not present. These data should not be used for future projects. Please obtain regular (6 months) updates rather than use outdated information.

Because of the high volume of requests for information that WDFW receives, we need to charge for these data to recover some of our costs. Enclosed is an invoice itemizing the costs for your data and instructions for submitting payment. There is a base cost of \$20.00 for all data requests; this covers setup, shipping and handling. Above that, there is an incremental cost for each map or magnetic media. Costs are as follows:

1:24,000 scale wildlife map	paper	\$ 1.50	polyester film	\$ 8.00
1:24,000 scale old growth map	materials		materials	
	labor	\$ 3.50	labor	\$ 3.50
	TOTAL	\$ 5.00	TOTAL	\$11.50
variable scale wildlife map (by county)				
1:100,000 scale wildlife map	paper		polyester film	
1:100,000 scale fish map	materials	\$ 3.00	materials	\$16.00
	labor	\$ 4.00	labor	\$ 4.00
	TOTAL	\$ 7.00	TOTAL	\$20.00
Magnetic media for digital data	5 1/4 inch floppy		3 1/2 inch floppy	
	materials	\$ 3.00	materials	\$ 3.30
	labor	\$ 5.00	labor	\$ 5.00
	TOTAL	\$ 8.00	TOTAL	\$ 8.30
	8mm data cartridge		9-track tape	
	materials	\$20.00	materials	\$22.00
	labor	\$15.00	labor	\$15.00
	TOTAL	\$35.00	TOTAL	\$37.00

Labor costs are only applied to requests from for-profit organizations.

Please note that sensitive information (e.g., threatened and/or endangered species) may be included in this data request. These species are vulnerable to disturbances and harassment. In order to protect the viability of these species we request that you not disseminate the information as to their whereabouts. Please refer to these species presence in general terms. For example: "A Peregrine Falcon is located within two miles of the project area".

If your request required a sensitive Fish and Wildlife Information Release Memorandum of Understanding (MOU) and you or your organization has one on file, please refer to that document for conditions regarding release of these data.

If you have any questions or problems with the data you received, contact Terry Johnson at (360) 664-0044 or me at (360) 902-2543.

Sincerely,

Lori Adkins
Lori Adkins, Cartographer
Priority Habitats and Species

Enclosures

WDFW ADMINISTRATIVE REGIONS AND LIST OF REGIONAL HABITAT PROGRAM MANAGERS



REGION 1

John Andrews
8702 North Division Street
Spokane, Washington 99218-1199
Phone: (509) 456-4082 Scan: 545-4082

REGION 4

Ted Muller
16018 Mill Creek Boulevard
Mill Creek, Washington 98012-1296
Phone: (206) 775-1311 Scan: 348-6509

REGION 2

Tracy Lloyd
1550 Alder Street N.W.
Ephrata, Washington 98823-9652
Phone: (509) 754-4624 Scan: none

REGION 5

Bryan Cowan
5405 N.E. Hazel Dell Avenue
Vancouver, Washington 98663-1299
Phone: (360) 696-6211 Scan: 476-6211

REGION 3

Ted Clausing
1701 South 24th Avenue
Yakima, Washington 98902-5720
Phone: (509) 575-2740 Scan: 558-2740

REGION 6

Dave Gufler
48 Devonshire Road
Montesano, Washington 98563-9618
Phone: (360) 249-6523 Scan: 234-2600

Washington Dept. of Fish and Wildlife - Wildlife Survey Data Management
Data Current as of May 21, 1996
Requested by EDAW for quad 4812235

Page 1 of 11

Name: BALD EAGLE
Indexcode: DF.416 State Status: ST Federal Status: FT
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: BERNATOWICZ, JEFFREY, WDFW
Name of Area:
Date of Sighting: 19940405
Number of Owners: 1 Site Name: MARINERS COVE
Name of Owner:
Agency Subsection:
Protection Status: 1 Data Point #: 41
General Description: BALD EAGLE NEST TOP OF DEAD TOP, 10 METERS SOUTH OF ROAD, NEXT TO DOMINANT SNAG.

Name: BALD EAGLE
Indexcode: DF.416 State Status: ST Federal Status: FT
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: WATSON, J
Name of Area:
Date of Sighting: 19890404
Number of Owners: 1 Site Name: POLNELL POINT
Name of Owner:
Agency Subsection:
Protection Status: 3 Data Point #: 4
General Description: POLNELL POINT TERR, NEST JUST S OF IRON SHED.

Name: BALD EAGLE
Indexcode: DF.416 State Status: ST Federal Status: FT
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: LESCHNER, L WDG
Name of Area:
Date of Sighting: 19860605
Number of Owners: 1 Site Name: POLNELL POINT
Name of Owner: WHIDBEY NAVAL AIR STATION
Agency Subsection:
Protection Status: 3 Data Point #: 20
General Description: POLNELL POINT TERR, NEST ON SOUTHEAST SHORE OF POINT. FRUSTRATION NEST?--6.

Name: BALD EAGLE
Indexcode: DF.416 State Status: ST Federal Status: FT
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: WATSON, J
Name of Area:
Date of Sighting: 19900405
Number of Owners: 1 Site Name: POLNELL POINT
Name of Owner: WHIDBEY NAVAL AIR STATION
Agency Subsection:
Protection Status: 3 Data Point #: 4
General Description: POLNELL POINT TERR: NEST IN FIR ABOUT 200FT S OF NEST 1.

SA Number: 665-1 Criterion: B
TRs: T32N R02E S02 SW0FSW
Dtcenter: 19940803
Region: 4
Lat/Long: 48171.0N122312.6W
Quadcode: 4812235
Quadname: CRESCENT HARBOR
County: ISLAND
Ownership Code: PVTTUU
Special Status Code:

SA Number: 114-1 Criterion: B
TRs: T32N R02E S09
Dtcenter: 19801201
Region: 4
Lat/Long: 481637N122332.9W
Quadcode: 4812235
Quadname: CRESCENT HARBOR 7.5
County: ISLAND
Ownership Code: USADOD
Special Status Code: MR

SA Number: 114-3 Criterion: B
TRs: T32N R02E S09
Dtcenter: 19860801
Region: 4
Lat/Long: 481626N122332.5W
Quadcode: 4812235
Quadname: CRESCENT HARBOR 7.5
County: ISLAND
Ownership Code: USADOD
Special Status Code: MR

SA Number: 114-4 Criterion: B
TRs: T32N R02E S09
Dtcenter: 19870701
Region: 4
Lat/Long: 481637N122332.9W
Quadcode: 4812235
Quadname: CRESCENT HARBOR 7.5
County: ISLAND
Ownership Code: USADOD
Special Status Code:

Washington Dept. of Fish and Wildlife - Wildlife Survey Data Management
Data Current as of May 21, 1996
Requested by EDAW for quad 4812235

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Name: BALD EAGLE
Indexcode: DF.416 State Status: ST Federal Status: FT
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: WATSON, JIM - WDW P.191 IN '92 SURVEY.
Name of Area:
Date of Sighting: 19920611
Number of Owners: 1 Site Name: POLNELL POINT
Name of Owner: WHIDBEY NAVAL AIR STATION
Agency Subsection: Protection Status: 3 Data Point #: 31
General Description: BALD EAGLE NEST, LOCATED IN FIR AT CORNER OF OPENING ON EAST SIDE OF POINT.

Name: BALD EAGLE
Indexcode: DF.416 State Status: ST Federal Status: FT
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: BERNATOWISZCZ
Name of Area:
Date of Sighting: 19940715
Number of Owners: 1 Site Name: POLNELL POINT
Name of Owner: WHIDBEY NAVAL AIR STATION
Agency Subsection: Protection Status: 3 Data Point #: 28
General Description: BALD EAGLE NEST, LOCATED IN FIR TREE ON NW SIDE OF POINT, BEST OBSERVED FROM W SIDE.

Name: BALD EAGLE
Indexcode: DF.416 State Status: ST Federal Status: FT
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: WATSON, J
Name of Area:
Date of Sighting: 19900606
Number of Owners: 1 Site Name: MAPLE GROVE
Name of Owner: MAPLE GROVE BCH ASSOC.
Agency Subsection: Protection Status: 1 Data Point #: 16
General Description: MAPLE GROVE BEACH TERR, NEST IN SNAG ON TOP OF BLUFF ABOVE OLD MAPLE GROVE RESORT.

Name: BALD EAGLE
Indexcode: DF.416 State Status: ST Federal Status: FT
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: BERNATOWISZCZ
Name of Area:
Date of Sighting: 19940621
Number of Owners: 1 Site Name: MAPLE GROVE
Name of Owner:
Agency Subsection: Protection Status: 29
General Description: BALD EAGLE NEST, LOCATED AT TOP OF GRAND FIR 75FT S OF ROAD, SW OF NEST #1 ON CAMANO ISLAND.

SA Number: 114- 6 Criterion: B
TRs: T32N R02E S09
Dtenter: 19930302
Region: 4
Latlong: 481634N1223332W
Quadcode: 4812235
Quadrname: CRESENT HARBOR 7.5
County: ISLAND
Ownership Code: USADOD
Special Status Code:

SA Number: 114- 5 Criterion: B
TRs: T32N R02E S09 NWOFNW
Dtenter: 19921001
Region: 4
Latlong: 481634N1223332W
Quadcode: 4812235
Quadrname: CRESENT HARBOR 7.5
County: ISLAND
Ownership Code: USADOD
Special Status Code:

SA Number: 862- 1 Criterion: B
TRs: T32N R02E S23 NEOFNW
Dtenter: 19941109
Region: 4
Latlong: 481507N1223101W
Quadcode: 4812235
Quadrname: CRESENT HARBOR
County: ISLAND
Ownership Code: PVTPVY
Special Status Code:

SA Number: 862- 2 Criterion: B
TRs: T32N R02E S23 SEOFNW
Dtenter: 19941109
Region: 4
Latlong: 481504N1223101W
Quadcode: 4812235
Quadrname: CRESENT HARBOR
County: ISLAND
Ownership Code: PVTPVU
Special Status Code:

Washington Dept. of Fish and Wildlife - Wildlife Survey Data Management
Data Current as of May 21, 1996
Requested by EDAW for quad 4812235

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Name: BALD EAGLE Indexcode: DF.416 State Status: ST Federal Status: FT Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG. Source of Lead: WATSON, J Name of Area: Number of Owners: . Site Name: DUGALLA BAY NORTH Name of Owner: Agency Subsection: Protection Status: 3 Data Point #: 21 General Description: DUGALLA BAY N TERR: NEST ON TOP OF SNAG-TOP TREE TO NW OF OPENING.	SA Number: 935- 1 Criterion: B TRs: T33N R02E S05 SE0FSW Dtenter: 19940720 Region: 4 Lat/Long: 482219N1223452W Quadcode: 4812235 Quadrname: CRESCENT HARBOR County: ISLAND Ownership Code: PVYUTU Special Status Code: Special Status Code:	Name: BALD EAGLE Indexcode: DF.416 State Status: ST Federal Status: FT Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG. Source of Lead: WATSON, J Name of Area: Number of Owners: . Site Name: DUGALLA BAY NORTH Name of Owner: Agency Subsection: Protection Status: 3 Data Point #: 23 General Description: DUGALLA BAY N TERR: NEST E OF HOUSE.	SA Number: 935- 3 Criterion: B TRs: T33N R02E S05 SW0FNE Dtenter: 19940720 Region: 4 Lat/Long: 482223N1223448W Quadcode: 4812235 Quadrname: CRESCENT HARBOR County: ISLAND Ownership Code: PVYUTU Special Status Code: Special Status Code:	Name: BALD EAGLE Indexcode: DF.416 State Status: ST Federal Status: FT Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG. Source of Lead: WATSON, JIM Name of Area: Number of Owners: . Site Name: DUGALLA BAY NORTH Name of Owner: Agency Subsection: Protection Status: 3 Data Point #: 22 General Description: DUGALLA BAY N TERR: NEST SW OF OPENING.	SA Number: 935- 2 Criterion: B TRs: T33N R02E S05 SW0FSE Dtenter: 19940720 Region: 4 Lat/Long: 482219N1223448W Quadcode: 4812235 Quadrname: CRESCENT HARBOR County: ISLAND Ownership Code: PVYUTU Special Status Code: Special Status Code:	Name: BALD EAGLE Indexcode: DF.416 State Status: ST Federal Status: FT Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG. Source of Lead: WATSON, J Name of Area: Number of Owners: . Site Name: DUGALLA BAY NORTH Name of Owner: R. BORN Agency Subsection: Protection Status: 3 Data Point #: 25 General Description: BALD EAGLE: DUGALLA BAY N TERR.	SA Number: 935- 4 Criterion: B TRs: T33N R02E S07 NE0FSE Dtenter: 19940720 Region: 4 Lat/Long: 482140N1223535W Quadcode: 4812235 Quadrname: CRESCENT HARBOR County: ISLAND Ownership Code: PVTPIN Special Status Code:
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Washington Dept. of Fish and Wildlife - Wildlife Survey Data Management
Data Current as of May 21, 1996
Requested by EDAW for quad 4812235

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Name: BALD EAGLE
Indexcode: DF.416 State Status: ST Federal Status: FT
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: BERNATOWICZ

Name of Area:
Date of Sighting: 19940621
Number of Owners: . Site Name: DUGUALLA BAY NORTH

Name of Owner:
Agency Subsection:
Protection Status:
General Description: Data Point #: 27 BALD EAGLE NEST IN TOP OF HEALTHY GRAND FIR ON E SIDE OF DRIVEWAY.

Name: BALD EAGLE
Indexcode: DF.416 State Status: ST Federal Status: FT
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: BERNATOWICZ, JEFFREY, WDEFW

Name of Area:
Date of Sighting: 19940408
Number of Owners: . Site Name: IKA ISLAND

Name of Owner:
Agency Subsection:
Protection Status: 3 Data Point #: 35
General Description: BALD EAGLE NEST NORTH SHORE, 100 METERS WEST OF SHACK.

Name: BALD EAGLE
Indexcode: DF.416 State Status: ST Federal Status: FT
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: WATSON, J

Name of Area:
Date of Sighting: 19890605
Number of Owners: 1 Site Name: IKA ISLAND
Name of Owner: IKADE INC.

Agency Subsection:
Protection Status: 3 Data Point #: 1
General Description: IKA N NEST, 20 M FROM TIDAL FLATS.

Name: BALD EAGLE
Indexcode: DF.416 State Status: ST Federal Status: FT
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: BERNATOWICZ

Name of Area:
Date of Sighting: 19930410
Number of Owners: 1 Site Name: IKA ISLAND
Name of Owner: IKADE INC.

Agency Subsection:
Protection Status: 3 Data Point #: 2
General Description: IKA W NEST, 175 M FROM TIDAL FLATS.

Criterion: B
TRs: T33N R02E S08 NW0ESW
Dtcenter: 19940720
Region: 4
Lat/Long: 482140N1223531W
Quadcode: 4812235
Quadname: CRESCENT HARBOR
County: ISLAND
Ownership Code: PVTTUTU
Special Status Code:

Criterion: B
TRs: T33N R02E S11
Dtcenter: 19940803
Region: 4
Lat/Long: 482158N1223148W
Quadcode: 4812235
Quadname: CRESCENT HARBOR
County: SKAGIT
Ownership Code: ST WDW
Special Status Code: WDW

Criterion: B
TRs: T33N R02E S12
Dtcenter: 19860201
Region: 4
Lat/Long: 482150N1223004W
Quadcode: 4812235
Quadname: CRESCENT HARBOR 7.5
County: SKAGIT
Ownership Code: PVTPVY
Special Status Code:

Criterion: B
TRs: T33N R02E S12
Dtcenter: 19840901
Region: 4
Lat/Long: 482140N1223014W
Quadcode: 4812235
Quadname: CRESCENT HARBOR 7.5
County: SKAGIT
Ownership Code: PVTPVY
Special Status Code:

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Name: BALD EAGLE Indexcode: DF.416 State Status: ST Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG. Source of lead: WATSON, JIM - WDW P.62 IN '92 SURVEY.	SA Number: 94- 3 Federal Status: FT Criterion: B TRS: T33N R02E S12 Dtenter: 19930302 Region: 4 Latlong: 482140N1223004W Quadcode: 4812235 Quadname: CRESCENT HARBOR 7.5 County: SKAGIT Ownership Code: PVTPVT Special Status Code: General Description: BALD EAGLE NEST, EAST NEST LOCATED 175M FROM TIDAL FLATS IN MIDDLE OF ISLAND.
Name: BALD EAGLE Indexcode: DF.416 State Status: ST Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG. Source of lead: WATSON, J Name of Area: Name of Ares: Date of Sighting: 19870408 Number of Owners: 1 Site Name: IKA ISLAND Name of Owner: IKADE INC. Agency Subsection: Protection Status: 3 Data Point #: 13 General Description: BALD EAGLE NEST, EAST NEST LOCATED 175M FROM TIDAL FLATS IN MIDDLE OF ISLAND.	SA Number: 94- 4 Federal Status: FT Criterion: B TRS: T33N R02E S12 Dtenter: 19840901 Region: 4 Latlong: 482136N1223004W Quadcode: 4812235 Quadname: CRESCENT HARBOR 7.5 County: SKAGIT Ownership Code: PVTPVT Special Status Code: General Description: BALD EAGLE NEST, 150 M FROM TIDAL FLATS.
Name: PEREGRINE FALCON Indexcode: DG.408 State Status: SE Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG. Source of lead: CANIFF, HUDDLE Name of Area: Name of Ares: Date of Sighting: 19940525 Number of Owners: . Site Name: IKA ISLAND Name of Owner: Agency Subsection: Protection Status: . Data Point #: 26 General Description: IKA ISLAND TERR. PEREGRINE FALCON SITE DISCOVERED LATE SEASON 1989. JUVENILE BIRD IN SAME VICINITY.	SA Number: 23- 1 Federal Status: FE Criterion: E TRS: T33N R02E S12 Dtenter: 19891001 Region: 4 Latlong: 482136N1223011W Quadcode: 4812235 Quadname: CRESCENT HARBOR 7.5 County: SKAGIT Ownership Code: PVTPIN Special Status Code: General Description: IKA ISLAND TERR. PEREGRINE FALCON SITE DISCOVERED OCCUPIED BY A PAIR LATE SEASON 1989. JUVENILE BIRD IN SAME VICINITY.
Name: PEREGRINE FALCON Indexcode: DG.408 State Status: SE Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG. Source of lead: HUDDLE,DOUG - WDW Name of Area: Name of Ares: Date of Sighting: 19920611 Number of Owners: . Site Name: IKA ISLAND Name of Owner: Agency Subsection: Protection Status: . Data Point #: 26 General Description: IKA ISLAND TERR. PEREGRINE FALCON ERYIE ON SAME CLIFF FACE AS SITE #1 BUT ON A DIFFERENT LEDGE.	SA Number: 23- 2 Federal Status: FE Criterion: E TRS: T33N R02E S12 Dtenter: 19930302 Region: 4 Latlong: 482136N1223011W Quadcode: 4812235 Quadname: CRESCENT HARBOR 7.5 County: SKAGIT Ownership Code: PVUUU Special Status Code:

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Name: PEREGRINE FALCON SA Number: 23- 3 Criterion: E
Indexcode: DG 408 State Status: SE Federal Status: FE TRS: T33N R02E S12
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: RUSS CANNIFF + D. HUDDLE, WDFW Dtenter: 19950913
Name of Area: Region: 4
Date of Sighting: 19950503 LatLong: 482136N1223022W
Number of Owners: . Site Name: IKA ISLAND Quadcode: 4812235
Name of Owner: County: CRESCENT HARBOR
Agency Subsection: Protection Status: Data Point #: 43 Ownership Code: PVTUUU
General Description: PEREGRINE FALCON EYRIE LOCATED HIGH ON THE ROCK FACE OF THE SW SIDE OF IKA
ISLAND. Special Status Code:

Name: GREAT BLUE HERON SA Number: 109- 1 Criterion: B
Indexcode: DJ 371 State Status: SM Federal Status: TRS: T33N R02E S12
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: DAVIDSON, MIKE -WDW Dtenter: 19920401
Name of Area: Region: 4
Date of Sighting: 19910513 LatLong: 482150N1223004W
Number of Owners: . Site Name: IKA ISLAND Quadcode: 4812235
Name of Owner: County: CRESCENT HARBOR 7.5
Agency Subsection: Protection Status: Data Point #: 1 Ownership Code: PVTUUU
General Description: IKA ISLAND GREAT BLUE HERON COLONY. 27 INAC NESTS-91; Special Status Code:

Name: BALD EAGLE SA Number: 524- 1 Criterion: B
Indexcode: DF 416 State Status: ST Federal Status: FT TRS: T33N R02E S22 NWOFNW
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: BERNATOWICZ Dtenter: 19950818
Name of Area: Region: 4
Date of Sighting: 19940715 LatLong: 481944N1223155W
Number of Owners: . Site Name: DUGUALLA BAY CENTRAL Quadcode: 4812235
Name of Owner: County: ISLAND
Agency Subsection: Protection Status: Data Point #: 32 Ownership Code: PVTUUU
General Description: BALD EAGLE NEST, LOCATED 1/3 FROM TOP OF DOUBLE TOP LEANING FIR ON BLUFF EDGE.
NEST ON ISLAND SIDE OF TREE. Special Status Code:

Name: BALD EAGLE SA Number: 300- 1 Criterion: B
Indexcode: DF 416 State Status: ST Federal Status: FT TRS: T33N R02E S22 NWOFNW
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: BERNATOWICZ Dtenter: 19950101
Name of Area: Region: 4
Date of Sighting: 19940715 LatLong: 482020N1223249W
Number of Owners: 1 Site Name: DUGUALLA BAY Quadcode: 4812235
Name of Owner: County: ISLAND
Agency Subsection: Protection Status: 3 Data Point #: 6 Ownership Code: ST DNR
General Description: DUGUALLA BAY TERR, NEST NEAR TOP OF BROKEN-TOP FIR, NW4 NW4 S22. Special Status Code: DNR

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Name: BALD EAGLE	SA Number: 902- 3	Criterion: B
Indexcode: DF.416	Federal Status: FT	TRS: T33N R02E S26 NW0FSE
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.		Dtenter: 19950913
Source of lead: JEFF BERNATOWICZ, WDFW		Region: 4
Name of Area:		Lat/Long: 481901N1223054W
Date of Sighting: 19950709		Quadcode: 4812235
Number of Owners: 1	Site Name: DUGALLA BAY SOUTH	Quadrname: CRESCENT HARBOR
Name of Owner: LESTER STONE		County: ISLAND
Agency Subsection:		Ownership Code: PVTPIN
Protection Status: 1	Data Point #: 45	Special Status Code:
General Description: BALD EAGLE NEST IN TOP OF DOUGLAS FIR, LESS THAN 100 FT FROM FIELD EDGE.		
Name: BALD EAGLE	SA Number: 902- 1	Criterion: B
Indexcode: DF.416	Federal Status: FT	TRS: T33N R02E S26 SW0FNE
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.		Dtenter: 19950913
Source of lead: WATSON, J		Region: 4
Name of Area:		Lat/Long: 481908N1223054W
Date of Sighting: 19910607		Quadcode: 4812235
Number of Owners: 1	Site Name: DUGALLA BAY SOUTH	Quadrname: CRESCENT HARBOR
Name of Owner: M. CHAMBERLAIN		County: ISLAND
Agency Subsection:		Ownership Code: PVTPIN
Protection Status: 1	Data Point #: 19	Special Status Code:
General Description: DUGALLA BAY SOUTH TERR: NEST ATOP BLUFF NORTH OF STRAWBERRY POINT.		
Name: BALD EAGLE	SA Number: 902- 2	Criterion: B
Indexcode: DF.416	Federal Status: FT	TRS: T33N R02E S26 SW0FNE
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.		Dtenter: 19951016
Source of lead: BERNATOWICZ		Region: 4
Name of Area:		Lat/Long: 481908N1223050W
Date of Sighting: 19940715		Quadcode: 4812235
Number of Owners: 1	Site Name: DUGALLA BAY SOUTH	Quadrname: CRESCENT HARBOR
Name of Owner:		County: ISLAND
Agency Subsection:		Ownership Code: PVTUUU
Protection Status: 1	Data Point #: 30	Special Status Code:
General Description: BALD EAGLE NEST, LOCATED IN FORK-TOPPED GRANDE FIR 200FT S OF NEST #1.		
Name: BALD EAGLE	SA Number: 526- 3	Criterion: B
Indexcode: DF.416	Federal Status: FT	TRS: T33N R02E S35 NE0FNE
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.		Dtenter: 19940803
Source of lead: BERNATOWICZ, JEFFREY, WDFW		Region: 4
Name of Area:		Lat/Long: 481836N1223025W
Date of Sighting: 19940405		Quadcode: 4812235
Number of Owners: 1	Site Name: STRAWBERRY POINT/WHIDBEY	Quadrname: CRESCENT HARBOR
Name of Owner: JUDY YOUNGBLOOD		County: ISLAND
Agency Subsection:		Ownership Code: PVTPIN
Protection Status: 1	Data Point #: 39	Special Status Code:
General Description: BALD EAGLE NEST TOP OF BROKEN TOP FIR, 100 METERS OFF CABIN AND LEVEL WITH ROOF.		
NEST BUILT FALL 1993		

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Name: BALD EAGLE
Indexcode: DF 416 State Status: ST Federal Status: FT
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: BERNATOWICZ, JEFF & RUTH MILNER - WDW
Name of Area:
Date of Sighting: 19930417 Site Name: STRAWBERRY POINT/WHIDBEY
Number of Owners: . Name of Owner:
Agency Subsection:
Protection Status: . Data Point #: 33
General Description: BALD EAGLE NEST, LOCATED AT TOP OF FIR TREE, 100 M SW OF NEW HOUSE & 25 M S OF RD. NEST VERY VISIBLE.

SA Number: 526-1 Criterion: B
TRN: T33N R02E S35 SE0FSE
Dtenter: 19950703
Region: 4
Latlong: 48°7'49"N 122°30'29"W
Quadcode: 4812235
Quadname: CRESCENT HARBOR
County: ISLAND
Ownership Code: PYTUUU
Special Status Code:

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Name: BALD EAGLE Indexcode: DF.416 State Status: ST Federal Status: FT Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG. Source of lead: WATSON, J	SA Number: 782- 1 Criterion: B TRs: T32N R01E S06 SEOFNE Dtenter: 19841201 Region: 4 Lat/Long: 481735N1224323W Quadcode: 4812236 Quadname: OAK HARBOR 7.5 County: ISLAND Ownership Code: PVTPIN Protection Status: Data Point #: 8 Agency Subsection: General Description: EVENDOWN TERR, NEST ON TOP OF FIR TREE.
Name: BALD EAGLE Indexcode: DF.416 State Status: ST Federal Status: FT Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG. Source of lead: WATSON, J	SA Number: 782- 2 Criterion: B TRs: T32N R01E S06 SEOFNE Dtenter: 19860801 Region: 4 Lat/Long: 481731N1224326W Quadcode: 4812236 Quadname: OAK HARBOR 7.5 County: ISLAND Ownership Code: PVTPIN Protection Status: Data Point #: 9 Agency Subsection: General Description: EVENDOWN TERR, NEST 50 FT EAST OF WEST BEACH ROAD. OSPREY-EAGLE COMBO CONDO.
Name: BALD EAGLE Indexcode: DF.416 State Status: ST Federal Status: FT Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG. Source of lead: WATSON, J	SA Number: 782- 3 Criterion: B TRs: T32N R01E S06 SEOFNE Dtenter: 19891101 Region: 4 Lat/Long: 481731N1224326W Quadcode: 4812236 Quadname: OAK HARBOR 7.5 County: ISLAND Ownership Code: PVTUUU Protection Status: Data Point #: 9 Agency Subsection: General Description: EVENDOWN TERR, NEST IN DOMINANT FIR IN CENTER OF STRIP OF TREES ABOUT 200 FT. SOUTH OF NEST #2.
Name: BALD EAGLE Indexcode: DF.416 State Status: ST Federal Status: FT Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG. Source of lead: BERNATOWICZ	SA Number: 782- 4 Criterion: B TRs: T32N R01E S06 SEOFNE Dtenter: 19930203 Region: 4 Lat/Long: 481731N1224323W Quadcode: 4812236 Quadname: OAK HARBOR 7.5 County: ISLAND Ownership Code: PVTUUU Protection Status: Data Point #: 14 Agency Subsection: General Description: BALD EAGLE NEST, LOCATED IN OLD GROWTH FIR NEAR SE CORNER OF TREE STRIP.

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Name: BALD EAGLE SA Number: 775-1 Federal Status: FT Criterion: RSC
Indexcode: DF.416 State Status: ST Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: 1984 MIDWINTER BALD EAGLE SURVEY
Name of Area:
Date of Sighting: 198401
Number of Owners: . Site Name: SARATOGA PASSAGE RSC
Name of Owner:
Agency Subsection: Protection Status: . Data Point #: 7 General Description: SARATOGA PASSAGE BALD EAGLE WINTER CONCENTRATION AREA.
1984-11-50; 1983-<10; 1982-<10; INCLUDES NW SIDE OF CAMANO ISLAND & E CENTRAL WHIDBEY ISLAND.

Name: BALD EAGLE SA Number: 357-1 Federal Status: FT Criterion: B
Indexcode: DF.416 State Status: ST Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: BERNATOWICZ
Name of Area:
Date of Sighting: 19940429
Number of Owners: . Site Name: OAK HARBOR
Name of Owner:
Agency Subsection: Protection Status: . Data Point #: 13 General Description: BALD EAGLE NEST LOCATED IN BROKEN TOP SECOND GROWTH FRI., NEST IN TOP 150 FT E OF HIGHWAY 20 ON WHIDBEY ISLAND.

Name: BALD EAGLE SA Number: 342-1 Federal Status: FT Criterion: B
Indexcode: DF.416 State Status: ST Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: BERNATOWICZ
Name of Area:
Date of Sighting: 19940621
Number of Owners: . Site Name: WEST BEACH
Name of Owner:
Agency Subsection: Protection Status: . Data Point #: 12 General Description: BALD EAGLE NEST. ON W SHORE OF WHIDBEY ISLAND E OF WEST BEACH RD & N OF VAN DAM RD.

Name: BALD EAGLE SA Number: 102-5 Federal Status: FT Criterion: B
Indexcode: DF.416 State Status: ST Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: BERNATOWICZ, JEFFREY, WDFW
Name of Area:
Date of Sighting: 19940519
Number of Owners: . Site Name: CRANBERRY LAKE
Name of Owner: MRS. KREIG
Agency Subsection: Protection Status: . Data Point #: 15 General Description: BALD EAGLE NEST 1/3 WAY DOWN DOUGLAS FIR, PASTURE. NEST BUILT SPRING 1994.

Name: BALD EAGLE SA Number: 102-5 Federal Status: FT Criterion: B
Indexcode: DF.416 State Status: ST Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: BERNATOWICZ, JEFFREY, WDFW
Name of Area:
Date of Sighting: 19940519
Number of Owners: . Site Name: CRANBERRY LAKE
Name of Owner: MRS. KREIG
Agency Subsection: Protection Status: . Data Point #: 15 General Description: BALD EAGLE NEST 1/3 WAY DOWN DOUGLAS FIR, 75 METERS SOUTH OF 2 SMALL PONDS IN

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Name: BALD EAGLE
Indexcode: DF.416 State Status: ST Federal Status: FT
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: BERNATOWICZ
Name of Area:
Date of Sighting: 19940621 Site Name: ROCKY POINT AULT FIELD
Number of Owners: 1 Name of Owner: WHIDBEY NAVAL AIR STATION
Agency Subsection:
Protection Status: 3 Data Point #: 11 General Description: BALD EAGLE. NEST ON W SIDE OF WHIDBEY ISLAND ON NAVAL AIR STATION. FROM TOP OF LIVING, OLD DOUG-FIR ON CLIFF.

Name: GREAT BLUE HERON
Indexcode: DJ.371 State Status: SM Federal Status: TRS
Precision: LOCATION SHOWN ACCURATE TO 1/4 MI RADIUS & CONFIRMED BY WDG.
Source of lead: ERICKSON, JOHN - WDW
Name of Area:
Date of Sighting: 19910509 Site Name:
Number of Owners: 1 Name of Owner: WHIDBEY NAVAL AIR STATION
Agency Subsection:
Protection Status: 3 Data Point #: 10 General Description: GREAT BLUE HERON NESTING COLONY: AULT FIELD. ROUGHLY 60 NESTS -88, 89; 45 TO 50 ACT NESTS-91;

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WASHINGTON DEPT OF FISH AND WILDLIFE - PRIORITY HABITATS AND SPECIES
***** SENSITIVE DATA - EDAW DATA RELEASE *****

This data release contains PHS maps or digital data considered sensitive information subject to WDFW's Sensitive Information MOU with EDAW

COMMON NAME	SPECIE CODE	USE	DATA SOURCE	QUAD USGS CODE	QUAD NAME
Bald eagle	HALE	B	PHS	4812235	CRESCENT HARBOR
Bald eagle	HALE	B	PHS	4812236	OAK HARBOR

WASHINGTON DEPT OF WILDLIFE

PRIORITY HABITATS AND SPECIES

Tabular Data Report - General Information - DRAFT

05/21/1996

form: 900657 species/habitat: HALE species use: B season: SU definition: 4T map accuracy: 1
sitename: IKA ISLAND BALD EAGLE TERRITORY
general description: EAGLE TERRITORY IDENTIFIED IN 1975, OCCUPIED IN 1990, PRODUCTIVE IN 1989.

source: WATSON, JIM, WDW, PERSONAL OBSERVATIONS.
synopsis: BREEDING SURVEYS.

form: 900893 species/habitat: HALE species use: B season: SU definition: 4T map accuracy: 1
sitename: EVENDOWN BALD EAGLE TERRITORY.
general description: EAGLE TERRITORY IDENTIFIED IN 1984, ACTIVE AND PRODUCTIVE IN 1990.

source: WATSON, JIM, WDW, PERSONAL OBSERVATIONS.
synopsis: BREEDING SURVEYS - GROUND OBSERVATIONS.

source: KLOPE, MATT NAVY BIOLOGIST
synopsis: EAGLE PAIR MAKES REGULAR USE OF ROCKY POINT.

form: 900894 species/habitat: HALE species use: B season: SU definition: 4T map accuracy: 1
sitename: POLNELL POINT BALD EAGLE TERRITORY
general description: EAGLE TERRITORY IDENTIFIED IN 1975, OCCUPIED IN 1989, PRODUCTIVE IN 1988.

source: WATSON, JIM, WDW, PERSONAL OBSERVATIONS.
synopsis: BREEDING SURVEYS - GROUND OBSERVATIONS.

source: KLOPE, MATT NAVY BIOLOGIST
synopsis: MANAGEMENT PLAN PREPARED BY USFWS ON FILE.

WASHINGTON DEPT OF WILDLIFE

PRIORITY HABITATS AND SPECIES

Tabular Data Report - General Information - DRAFT

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form: 900895 species/habitat: HALE species use: B season: SU definition: 4T map accuracy: 1
sitename: DUGUALLA BAY SOUTH BALD EAGLE TERRITORY.
general description: EAGLE TERRITORY IDENTIFIED IN 1986, ACTIVE IN 1990, PRODUCTIVE IN 1989.

source: WATSON, JIM, WDW, PERSONAL OBSERVATIONS.
synopsis: BREEDING SURVEYS & GROUND OBSERVATIONS.

form: 900896 species/habitat: HALE species use: B season: SU definition: 4T map accuracy: 1
sitename: DUGUALLA BAY BALD EAGLE TERRITORY.
general description: EAGLE TERRITORY IDENTIFIED IN 1979, ACTIVE AND PRODUCTIVE IN 1990.

source: WATSON, JIM, WDW, PERSONAL OBSERVATIONS.
synopsis: BREEDING SURVEYS.

form: 900897 species/habitat: HALE species use: B season: SU definition: 4T map accuracy: 1
sitename: DUGUALLA BAY NORTH BALD EAGLE TERRITORY
general description: EAGLE TERRITORY IDENTIFIED IN 1987, ACTIVE AND PRODUCTIVE IN 1990.

source: WATSON, JIM, WDW, PERSONAL OBSERVATIONS.
synopsis: BREEDING SURVEYS - GROUND OBSERVATIONS, ALTERNATE NESTS HELPFUL IN DELINEATING THE TERRITORY.

date: 06 90 code: NEST

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PRIORITY HABITATS AND SPECIES

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05/21/1996

form: 900899 species/habitat: HALE species use: B season: SU definition: 4T map accuracy: 1
sitename: MAPLE GROVE BALD EAGLE TERRITORY.
general description: EAGLE TERRITORY IDENTIFIED IN 1984, ACTIVE IN 1990, PRODUCTIVE IN 1989.

source: WATSON, JIM, WDW synopsis: BREEDING SURVEYS - GROUND OBSERVATIONS - MANAGEMENT PLAN.

form: 902070 species/habitat: UNOS species use: SEASONAL OPEN SPACE AREAS season: definition: 4 map accuracy: 1
sitename: ISLAND COUNTY NATURAL OPEN SPACE AREAS
general description: STEEP FORESTED SLOPES AND BLUFFS TOPPED BY FORESTED AREAS.

source: DNR ORTHO PHOTOS.
synopsis: DELINEATION MADE FROM ORTHO PHOTOS. COVER TYPE ESTABLISHED BY SITE VISITS.

form: 902542 species/habitat: WET species use: SEASONAL HARBOR season: definition: 4 map accuracy: 1
sitename: WHIDBEY ISLAND WETLANDS NEAR CRESCENT HARBOR.
general description: SCRUB-SHRUB, FORESTED, EMERGENT, AND OPEN-WATER WETLANDS ON WHIDBEY ISLAND IN THE VICINITY OF CRESCENT HARBOR.

source: NATIONAL WETLANDS INVENTORY-USFWS
synopsis:

date: 06 90 code: NEST

date: 06 90 code: ORTHO

date: 84 code: ORTHO

date: 84 code: GSMAP

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PRIORITY HABITATS AND SPECIES

Tabular Data Report - General Information - DRAFT

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form: 902732 species/habitat: WET species use: season: definition: 4 map accuracy: 1
sitename: WHIDBEY ISLAND WETLANDS NEAR OAK HARBOR.
general description: EMERGENT, SCRUB-SHRUB, FORESTED, AND OPEN-WATER WETLANDS ON WHIDBEY ISLAND IN THE VICINITY OF OAK HARBOR.
date: 87 code: GSMAP

source: NATIONAL WETLANDS INVENTORY-USFWS
synopsis:

form: 902744 species/habitat: WET species use: season: definition: 4 map accuracy: 1
sitename: SKAGIT RIVER DELTA WETLANDS.
general description: WETLANDS OF VARIOUS TYPES IN THE SKAGIT DELTA. SALTWATER, BRACKISH, AND FRESHWATER ARE REPRESENTED. INCLUDES THE SKAGIT BAY AREA AND MANY SMALL TRIBUTARIES.
date: 90 code: PROF

source: MULLER, TED, WDW; PERSONAL OBSERVATIONS.
synopsis: SITE VISITS TO THE DELTA AREA.

form: 902746 species/habitat: UNOS species use: season: definition: 4 map accuracy: 1
sitename: SKAGIT RIVER DELTA WILDLIFE LANDS.
general description: SKAGIT WILDLIFE AREA. A COMBINATION OF FARMED AND UNFARMED LANDS INCLUDING A LARGE EXPANSE OF MARSH AND OTHER WETLANDS. MANAGED FOR WATERFOWL BENEFITS.
date: 06 91 code: PROF

source: MULLER, TED, WDW; PERSONAL OBSERVATIONS.
synopsis: SITE VISITS AND HUNTING TRIPS.

source: WDW LAND OWNERSHIP RECORDS.
synopsis:

PRIORITY HABITATS AND SPECIES
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form: 902750 species/habitat: WAFO species use: RC season: WS F definition: 4 map accuracy: 1
sitename: WHIDBY/CAMANO WATERFOWL HABITAT.
general description: LAKES AND MARSHES IN ISLAND COUNTY THAT PROVIDE IMPORTANT FOOD RESOURCES AND REFUGIA FOR WATERFOWL, SHOREBIRDS, AND MARINE BIRDS.

source: LESCHNER, LORA, WDW; PERSONAL OBSERVATIONS.
synopsis: FREQUENT VISITS TO THESE SITES TO SURVEY WATERFOWL.

date: 90 code: PROF

source: KRAEMER, CURT, WDW; PERSONAL OBSERVATIONS.
synopsis: FREQUENT SITE VISITS TO SURVEY LAKES AND CHECK FISHERMEN.

date: 90 code: PROF

form: 902751 species/habitat: WET species use: season: definition: 4 map accuracy: 1
sitename: CRANBERRY LAKE WETLANDS.
general description: WETLANDS ASSOCIATED CRANBERRY LAKE.

source: STENDAL, ARTHUR, WDW; PERSONAL OBSERVATION
synopsis: VISITED IN RESPONSE TO A REPORT OF HPA VIOLATION

date: 03 91 code: PROF

form: 902757 species/habitat: UNOS species use: season: definition: 4 map accuracy: 1
sitename: NORTH SWANTON PARCEL
general description: STATE LAND INCLUDING TIDAL MARSH AND UPLANDS WITH OPEN AND WOODED PORTION.

source: DNR ORTHO PHOTON T33N R1E
synopsis:

date: 84 code: ORTHO

WASHINGTON DEPT OF WILDLIFE

PRIORITY HABITATS AND SPECIES

Tabular Data Report - General Information - DRAFT

05/21/1996

form: 902773 species/habitat: UNOS species use: season: definition: 4 map accuracy: 1
 sitename: SKAGIT WILDLIFE AREA.
 general description: DEPARTMENT OWNED LANDS WITHIN AND ALONG THE SKAGIT ESTUARY. THESE LANDS ARE A BROAD ARRAY OF TYPES, TIDAL MARSH, FRESHWATER MARSH, RIVERINE WETLANDS, CROPLANDS, AND RIPARIAN.
 source: MULLER, TED, WDW; PERSONAL OBSERVATIONS.
 synopsis: NUMEROUS SITE VISITS TO THIS AREA.
 source: WDW LANDS OWNERSHIP RECORDS.
 synopsis:

form: 902783 species/habitat: WAFO species use: RLC season: WS F definition: 4 map accuracy: 1
 sitename: WHIDBY ISLAND WATERFOWL WINTERING AREA.
 general description: SALTWATER BAYS ALONG THE SHORES OF WHIDBY ISLAND. THESE AREAS PROVIDE SHELTER AND FOOD FOR LARGE NUMBERS OF WATERFOWL, SHOREBIRDS, AND SEABIRDS.
 source: LESCHNER, LORA, WDW; PERSONAL OBSERVATIONS.
 synopsis: ANNUAL WINTER WATERFOWL SURVEYS IN THESE AREAS.
 source: CARRIN, LYMAN, WDW; PERSONAL OBSERVATIONS.
 synopsis: REGULARLY PATROLS THIS AREA.

form: 902809 species/habitat: ISLAND species use: season: definition: 4 map accuracy: 1
 sitename: GOAT ISLAND
 general description: STEEP SIDED FORESTED ISLAND IN SKAGIT BAY. EXTREMELY GOOD FORAGING AREA FOR HAWKS AND EAGLES. FREE OF MOST MAMMALIAN PREDATORS.
 source: WATSON, JIM, WDW; PERSONAL OBSERVATIONS.
 synopsis: THESE AREAS ARE WITHIN EAGLE FORAGING AREAS DELINEATED BY SITE VISITS.

WASHINGTON DEPT OF WILDLIFE

PRIORITY HABITATS AND SPECIES
Tabular Data Report - General Information - DRAFT
05/21/1996

7

form: 902810 species/habitat: WAFO season: WS F definition: 4 map accuracy: 1
sitename: SKAGIT BAY WATERFOWL STAGING AND WINTERING AREA.
general description: SALTWATER FEEDING AND LOAFING AREAS IN SKAGIT BAY AND ADJACENT MARSHLANDS.

source: MULLER, TED, WDW; PERSONAL OBSERVATIONS.
synopsis: PERSONAL SITE VISITS AND HUNTING ACTIVITY.

date: 90 code: PROF

form: 902811 species/habitat: ISLAND season: definition: 4 map accuracy: 1
sitename: IKA ISLAND.
general description: STEEP SIDED FORESTED ISLAND IN SKAGIT BAY. EXTREMELY GOOD FORAGING AREA FOR HAWKS AND EAGLES. FREE OF MOST MAMMALIAN PREDATORS.

source: WATSON, JIM, WDW; PERSONAL OBSERVATIONS.
synopsis: THESE AREAS ARE WITHIN EAGLE FORAGING AREAS DELINEATED BY SITE VISITS.

date: 90 code: PROF

form: 902812 species/habitat: ISLAND season: definition: 4 map accuracy: 1
sitename: MCGLINN ISLAND.
general description: STEEP SIDED FORESTED ISLAND IN SKAGIT BAY. EXTREMELY GOOD FORAGING AREA FOR HAWKS AND EAGLES. FREE OF MOST MAMMALIAN PREDATORS.

source: WATSON, JIM, WDW; PERSONAL OBSERVATIONS.
synopsis: THESE AREAS ARE WITHIN EAGLE FORAGING AREAS DELINEATED BY SITE VISITS.

date: 90 code: PROF

PRIORITY HABITATS AND SPECIES

Tabular Data Report - General Information - DRAFT
05/21/1996

form: 903606 species/habitat: WET species use: season: definition: 4 map accuracy: 1
sitename: REGION 4 SALTWATER WETLANDS.
general description: PUGET SOUND COASTAL SALT MARSHES, SALT MEADOWS, AND BRACKISH MARSHES.

source: WASHINGTON STATE COASTAL ZONE ATLAS, D.O.E., 1979.
synopsis: D.O.E. SPONSORED MAPPING OF COASTAL FEATURES.
date: 0579 code: CZA

form: 903608 species/habitat: HALE species use: B season: SU definition: 4T map accuracy: 1
sitename: ROCK POINT
general description: EAGLE TERRITORY IDENTIFIED 1990; ACTIVE AND PRODUCTIVE.
date: 06 90 code: NEST

source: WATSON JIM WDW 1990 PERSONAL OBSERVATIONS
synopsis: BREEDING SURVEYS.
date: 06 90 code: NEST

form: 903609 species/habitat: HALE species use: B season: SU definition: 4T map accuracy: 1
sitename: WEST BEACH
general description: EAGLE TERRITORY IDENTIFIED IN 1990; ACTIVE AND PRODUCTIVE
date: 06 90 code: NEST

source: WATSON; JIM WDW 1990, PERSONAL OBSERVATION.
synopsis: BREEDING SURVEYS.

WASHINGTON DEPT OF WILDLIFE

PRIORITY HABITATS AND SPECIES

Tabular Data Report - General Information - DRAFT
05/21/1996

form: 903610 species/habitat: HALE species use: B season: SU definition: 4T map accuracy: 1
sitename: OAK HARBOR
general description: EAGLE TERRITORY IDENTIFIED IN 1991 ACTIVE AND PRODUCTIVE

source: WATSON, JIM 1991 PERSONAL OBSERVATIONS
synopsis: BREEDING SURVEYS
date: 06 91 code: NEST

form: 904464 species/habitat: PHVI species use: PA season: SU definition: 0 map accuracy: 1
sitename:
general description: HARBOR SEAL HAUL OUT SITE WHERE PUPPING OCCURS SEASONALLY

source: STEVE JEFFRIES, MDW
synopsis: AERIAL SURVEYS
date: 91 code: PROF

form: 904465 species/habitat: PHVI species use: HO season: WSUF definition: 0 map accuracy: 1
sitename:
general description: HARBOR SEAL HAUL OUT SITE-YEAR AROUND

source: STEVE JEFFRIES, MDW
synopsis: AERIAL SURVEYS
date: 91 code: PROF

WASHINGTON DEPT OF WILDLIFE

PRIORITY HABITATS AND SPECIES

Tabular Data Report - General Information - DRAFT

05/21/1996

10

form: 904711 species/habitat: ESTUR species use: season: definition: 0 map accuracy: 1
sitename:
general description: ESTUARINE ZONE-COASTAL ZONE ATLAS OF WASHINGTON-STRONGLY INFLUENCED BY THE MARIN E ENVIRONMENT AND CAN BE DISTINGUISHED BY A BRANCHING CHANNEL PATTERN IN A BROAD FLAT VALLEY CZA CODE 511.
source: COASTAL ZONE ATLAS OF WASHINGTON. STATE OF WASHINGTON DEPT OF ECOLOGY. date: 78 code: CZA
synopsis:

form: 904754 species/habitat: ESTUR species use: season: definition: 0 map accuracy: 1
sitename:
general description: BAY/ESTUARY-COASTAL ZONE ATLAS CODE 54-MODERATELY PROTECTED MARINE EMBAYMENTS WI TH FREE CONNECTIONS WITH THE OPEN SEA. BLUFFS, REACH SUBSTRATES MARSHE, EELGRAS S BEDS, AND OTHER INTERTIDAL HABITATS ARE ASSOCIATED WITH IT.
source: COASTAL ZONE ATLAS OF WASHINGTON. STATE OF WASHINGTON DEPT OF ECOLOGY. date: 78 code: CZA
synopsis:

form: 904772 species/habitat: SLOUGH species use: season: definition: 0 map accuracy: 1
sitename:
general description: MARINE SLOUGH-COASTAL ZONE ATLAS OF WASHINGTON-NARROW INLETS TYPICALLY FORMING O N RIVER DELTAS WHICH RECEIVE TIDAL BACKUP WATER AND VERY LITTLE FRESH WATER RUNO FF. CZA CODE 572.
source: COASTAL ZONE ATLAS OF WASHINGTON. STATE OF WASHINGTON DEPT OF ECOLOGY. date: 78 code: CZA
synopsis:

WASHINGTON DEPT OF WILDLIFE

PRIORITY HABITATS AND SPECIES

Tabular Data Report - General Information - DRAFT

05/21/1996

11

form: 904776 species/habitat: CLIFF species use: season: definition: 0 map accuracy: 1
sitename: general description: BLUFF-COASTAL ZONE ATLAS OF WASHINGTON-NONVEGETATED STEEP TO MODERATE SLOPES OF VARYING SUBSTRATE. BLUFFS OFTEN SERVE AS BUFFER BETWEEN DEVELOPED UPLANDS AND WEILANDS AT THEIR BASE CREATING IMPORTANT STRIPS OF COASTAL HABITAT. CZA CODE 76.
source: COASTAL ZONE ATLAS OF WASHINGTON. STATE OF WASHINGTON DEPT OF ECOLOGY date: 78 code: CZA
synopsis:



CITY OF OAK HARBOR

3075 300 Avenue West
City Hall (360) 679-5551

Oak Harbor, Washington 98277

August 9, 1996

Neil Bass, Director
Environmental Planning and Natural Resources Division
Department of the Navy
19917 7th Avenue NE
Poulsbo, WA 98270-7570

Re: Preliminary EA Review, Marina Renovation, NASWI

Dear Mr. Bass:

Staff has reviewed the proposed project Environmental Assessment (EA) and has found that the proposed project is not required to receive a Shoreline Substantial Development Permit through the City of Oak Harbor. The Shoreline Master Program for Oak Harbor states:

"Unless specifically required by 33 USCS 1323, the Shoreline Master Program shall not apply to federal agency actions in areas adjacent to Crescent Harbor. The Shoreline Master Program shall apply to any action to be taken or is taken on land adjacent to Crescent Harbor which is leased or licensed for use to any private party, any State agency, school district, college, county or municipal government."

Therefore, mitigation measures that refer to receiving such a permit (such as Mitigation Measure 3.1.3) may be changed to reflect that the Substantial Development Permit is not required from Oak Harbor.

Staff would also like to comment that the proposed marina meets the purpose and allowed uses for the "urban" zone within the Shoreline Master Program for Oak Harbor.

The City of Oak Harbor, therefore, does not object to the proposed renovation of the seaplane base marina, contingent upon the project meeting Federal guidelines for coastal zone management.

If you have any questions, please feel free to contact me at (360) 240-6447.

Sincerely,

Debra D. Wright
Planner

APPENDIX B

MEMORANDUM OF AGREEMENT (MOA)

BETWEEN NASWI AND SHPO

MEMORANDUM OF AGREEMENT
BETWEEN NAVAL AIR STATION, WHIDBEY ISLAND AND
THE WASHINGTON STATE OFFICE OF ARCHAEOLOGY
AND HISTORIC PRESERVATION,
REGARDING THE DEMOLITION OF BUILDING 19

WHEREAS, Naval Air Station (NAS), Whidbey Island recognizes building 19 as eligible for listing on the National Register of Historic Places; and

WHEREAS, NAS, Whidbey Island has determined that the increasing costs of maintenance and the deteriorated condition of building 19 preclude rehabilitation or stabilization treatments; and that the demolition of the building will have an adverse effect upon historic properties; and

WHEREAS, NAS, Whidbey Island consulted with the Washington State Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation (AHP) pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f);

NOW THEREFORE, NAS Whidbey Island, SHPO and AHP agree that NAS Whidbey Island shall implement the undertaking in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

Stipulations

NAS Whidbey Island will ensure that it carries out the following measures:

1. Prior to the demolition of building 19, and within 180 days of the execution of this agreement, NAS Whidbey Island will implement the recommendations of the SHPO and consult with the Columbia-Cascades Systems Support Office of the National Park Service on the level and kind of recordation required for this historic property. NAS Whidbey Island will not demolish building 19 until the SHPO concurs NAS Whidbey Island has taken photographs appropriate to the recordation. NAS Whidbey Island will provide copies of the documentation to the SHPO and local archives designated by the SHPO.

2. Interpretation: After the demolition of building 19, NAS Whidbey Island will install an interpretive display in the vicinity of building 19 to inform the general public of the structures general appearance and function. This display will be erected within 180 days after the demolition of the structure.

3. Dispute Resolution: Should the SHPO or the AHP object to any aspect of the implementation of this Memorandum of Agreement, NAS Whidbey Island shall consult with the objecting party to resolve the objection. If NAS Whidbey Island determines that the objection cannot be resolved, NAS Whidbey Island shall forward all

documentation relevant to the dispute to the ACHP. Within 30 days after receipt of all the pertinent documentation, the ACHP will either: (a) provide NAS Whidbey Island with recommendations, which NAS Whidbey Island will take into account in reaching a final decision regarding the dispute, or; (b) notify NAS Whidbey Island that it will comment pursuant to 36 CFR Section 800.6 (c)(2) with reference to the subject of the dispute. Any recommendation or comment provided by the ACHP will be understood to pertain only to the subject of the dispute; NAS Whidbey Islands' responsibility to carry out all actions under this Memorandum of Agreement that are not subjects of the dispute will remain unchanged.

4. Amendments: Any party of this Memorandum of Agreement may request that it be amended, whereupon the parties will consult in accordance with 36 CFR 800.5(e)(5) to consider such amendment.

Execution of this Memorandum of Agreement and implementation of its terms evidence that NAS Whidbey Island has afforded the ACHP an opportunity to comment on the demolition of building 19, and that NAS Whidbey Island has taken into account the effects of the undertaking on historic properties.

NAVAL AIR STATION, WHIDBEY ISLAND

By:



Date:

24 Apr 96

Captain Larry J. Munns
Commanding Officer

WASHINGTON STATE HISTORIC PRESERVATION OFFICER

By:



Date: 5/14/96

Mary M. Thompson
State Historic Preservation Officer

ACCEPTED for the Advisory Council on Historic Preservation

By:

Robert D. Bush
Executive Director

Date:



DEPARTMENT OF THE NAVY

NAVAL AIR STATION WHIDBEY ISLAND
OAK HARBOR, WASHINGTON 98278-5000

5090
Ser N44-60:Ke/1160
April 29, 1996

Mr. David Hanson
Department of Community Development
Office of Archaeology and Historic Preservation
P.O. Box 48343
Olympia, WA 98504-8343

Dear Mr. Hanson:

Enclosed for your signature is the revised Memorandum of Agreement (MOA) for the demolition of the Seaplane Base Marina Boathouse (Building 19) between your agency and the Naval Air Station, Whidbey Island.

The Marina Building, constructed in 1942, has been listed as a Category II structure in the NAS Whidbey Island Draft Historic and Archeological Resources Protection Plan. Demolition of the structure has been determined to be the only option due to the structures deteriorated condition and the associated high costs of renovation. The Navy is currently preparing an Environmental Assessment for this project which will include the Historic American Buildings Survey. This document will be forwarded to your office in draft form for review and comments.

Please sign and return the enclosed MOA. Upon receipt of the signed MOA, the Station will forward the document to the Advisory Council on Historic Preservation for their signature. After all parties have signed the original, a copy will be forwarded for your records.

Sincerely,

K. A. Souders

K. A. SOUDERS
Director, Environmental Affairs
By direction of the
Commanding Officer

Encl:

(1) Memorandum of Agreement

Copy To:

COMNAVBASE SEATTLE (N4)
EFA NW (Code 20CS)
NAS N46
NAS N01J
NAS N01F



DEPARTMENT OF THE NAVY

NAVAL AIR STATION WHIDBEY ISLAND
OAK HARBOR, WASHINGTON 98278-50005090
Ser. N4460:Re/2529
September 18, 1995

Ms. Claudia Nissley
 Director, Western Office
 Advisory Council on Historic Preservation
 730 Simms Street, Suite 401
 Golden, CO 80401

Dear Ms. Nissley:

Naval Air Station, Whidbey Island, has initiated the consultation process to demolish a structure known as the Marina Boathouse (building 19) located on the Seaplane Base. This structure has been identified in the station's Draft Historic and Archeological Resources Protection Plan as a category II, and thus requires consultation with the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (AHP).

NAS Whidbey Island has contacted the SHPO and agrees that the proposed demolition of the structure constitutes an adverse effect under 36 CFR 800.9 (b)(1).

It was determined by NAS Whidbey Island that the rehabilitation of the structure is not feasible, as suggested by Mr. Stephen Mathison in his enclosed letter of August 3, 1995. A recent document entitled Marine Demolition/Renovation prepared by ABAM Engineers, Inc. developed cost estimates of \$1,444,000 to rehabilitate and \$1,733,000 to renovate and modify the structure. Neither of these proposals are feasible under current or anticipated budgets.

NAS Whidbey Island will be initiating the process of entering into a Memorandum of Agreement with the SHPO and the AHP for the adverse effect of the demolition of the Marina Boathouse. NAS Whidbey Island has also contacted the National Park Service to begin the documentation process under the Historic American Building Survey Standards.

We request that you provide any direction or information which will allow NAS Whidbey Island to streamline this process. Please direct written responses to Mr. Matthew Klope, who can be reached at (360) 257-4330/1009 for verbal inquiries.

Sincerely,

K. A. SOUDERS
 Director, Environmental Affairs
 By direction of the
 Commanding Officer

Encl:

(1) Mathison Letter

Blind copy to:
 NAS N464



STATE OF WASHINGTON

DEPARTMENT OF COMMUNITY, TRADE AND ECONOMIC DEVELOPMENT

OFFICE OF ARCHAEOLOGY AND HISTORIC PRESERVATION

111 21st Avenue S.W. • P.O. Box 48343 • Olympia, Washington 98504-8343 • (360) 753-4011

Date: 9/6/95Log: 090795 - 20 - USNRe: NASW1, Building 19:Remove Transite Siding

Greetings:

Thank you for contacting the Washington State Office of Archaeology and Historic Preservation (OAHP). In an effort to speed our response, OAHP has formulated this response letter.

Please see the checklist below. All categories indicated with an "X" comprise our response to your communication.

I concur X \do not concur with conclusion(s) in your correspondence (see below).

1. Cultural resources have previously been identified in project area.
2. Cultural resource survey recommended in project area.
3. Property(ies) identified in project area is (are) National Register eligible, or is are)located in a National Register listed or eligible historic district. Property Name(s): _____
 Please send additional information for OAHP review.
4. X Proposal will have no adverse effect on National Register listed or eligible property(ies).
5. Proposal will have an adverse effect upon National Register listed or eligible property(ies). Contact OAHP once mitigating measures have been identified.
6. Property is listed in the Washington State Register of Historic Places. Contact the appropriate building official in regard to completing the SEPA Checklist.
7. Cultural resource(s) has (have) been designated by a local jurisdiction. Contact local historic preservation authority, _____ at () _____.
8. Apparent initiation of project work precludes useful OAHP comments. Therefore, we cannot provide project review. Contact the responsible federal agency for further guidance.
9. No further contact with OAHP regarding this action is necessary.

Again, thank you for contacting OAHP. Should you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Stephen A. Mathison".

Stephen A. Mathison
Restoration Designer13 SEP 1995
Chrono
N 04460/61



DEPARTMENT OF THE NAVY

NAVAL AIR STATION WHIDBEY ISLAND
OAK HARBOR, WASHINGTON 98278-5000

5090
Ser N4460:Ke/2320
August 28, 1995

Mr. David Hanson
Department of Community Development
Office of Archaeology and Historic Preservation
P.O. Box 48343
Olympia, WA 98504-8343

Dear Mr. Hanson:

Naval Air Station, Whidbey Island, has determined that the rehabilitation of Building 19 (Boathouse) is not feasible as suggested by Mr. Mathison in his correspondence of August 3, 1995. A recent document entitled Marine Demolition/Renovation prepared by ABAM Engineers Inc. developed cost estimates of \$1,444,000 to rehabilitate and \$1,733,000 to renovate and modify the structure. Neither of these proposals are feasible with current or anticipated budgets.

Based upon the decision to proceed with the demolition of Building 19, NAS Whidbey Island is first seeking a no adverse concurrence to remove all transite siding (an asbestos-containing material) from the structure. Since this material was placed on the structure in 1953, it was not part of the original construction. This siding has sections that are currently fracturing and falling off into the marine waters. The removal of this material would allow for a more accurate documentation of the original structure under the Historic American Building Survey Standards.

NAS Whidbey Island will be initiating the process of entering into a Memorandum of Agreement with your office for the adverse effect of the demolition of Building 19 (Boathouse). Please provide appropriate materials which will allow the station to proceed with this process.

NAS Whidbey Island has also contacted the National Park Service to begin the documentation process under the Historic American Building Survey Standards.

Please direct your written response to Mr. Matthew Klope who can be reached at (360) 257-4330 for verbal inquiries.

Sincerely,

K. A. Souders
for

K. A. SOUDERS
Director, Environmental Affairs
By direction of the
Commanding Officer

Blind copy to:
NAS N00
NAS N464
MWR



STATE OF WASHINGTON

DEPARTMENT OF COMMUNITY, TRADE AND ECONOMIC DEVELOPMENT

OFFICE OF ARCHAEOLOGY AND HISTORIC PRESERVATION

111 21st Avenue S.W. • P.O. Box 48343 • Olympia, Washington 98504-8343 • (360) 753-4011

August 3, 1995

Mr. K. A. Souders, Director
Environmental Affairs
Department of the Navy
Naval Air Station Whidbey Island
Oak Harbor, Washington 98278-5000

Log: 080195-03-USN
Re: NASWI, Building 19: Demolition

Dear Mr. Souders:

The above referenced proposal has been reviewed under provisions of Section 106 of the National Historic Preservation Act of 1966 and 36 CFR 800.

Building 19, the Boathouse, is a contributing property in the Seaplane Base Historic District, which has been determined eligible for the National Register of Historic Places. Its proposed demolition constitutes adverse effect under 36 CFR 800.9 (b) (1).

If options to demolition are not feasible, a Memorandum of Agreement (MOA) should be drawn up which stipulates measures to mitigate the adverse effect (see 36 CFR 800.5 (e)). Documentation of the structure to Historic American Building Survey (HABS) Standards is one typical mitigation measure for demolition of eligible properties.

However, we would first urge the navy to reconsider its plan to demolish the property, and explore uses for a rehabilitated structure. If not feasible, other mitigation measures should be considered along with HABS documentation.

If you wish to discuss our review of this proposal, alternative uses, or mitigation measures appropriate, or an MOA; please contact me at (360) 753-7436.

Sincerely,

A handwritten signature in black ink that reads "Stephen A. Mathison".

Stephen A. Mathison
Restoration Designer

07 AUG 1995

Curator

N44

N4460

SAM:tjt



3



DEPARTMENT OF THE NAVY

NAVAL AIR STATION WHIDBEY ISLAND
OAK HARBOR, WASHINGTON 98278-5000

5090
Ser N44-60:Ke/1991
July 26, 1995

Mr. David Hanson
Department of Community Development
Office of Archaeology and Historic Preservation
P.O. Box 48343
Olympia, WA 98504-8343

Dear Mr. Hanson:

Naval Air Station, Whidbey Island, is interested in the demolition of the building 19 boathouse, located at the Seaplane Base marina facility. It was constructed in two phases, in 1942 and 1944, and is currently condemned due to roof structure failures. In a document entitled Marina Demolition/Renovation prepared by ABAM Engineers Inc., December 1, 1994, several alternatives and associated projected costs were described for building 19 and are listed below:

Scheme I	Partial Demolition	\$300,000.00
Scheme II	Complete Demolition	\$657,000.00
Scheme III	Rehabilitate Existing	\$1,444,000.00
Scheme IV	Renovation/Modification	\$1,733,000.00

The Historic and Archeological Resources Protection Plan for NAS Whidbey Island prepared in November 1994 has building 19 listed as a category II structure and thus requires the Navy to consult with your agency for any proposed action regarding its potential eligibility to the National Register.

The Navy's proposal is twofold based on the determination that there are no reasonable or prudent uses for the building 19 boathouse. First, the Navy would like to remove all transite siding from the structure, which is considered an asbestos-containing material and is currently falling off into intertidal waters of Crescent Harbor. Second, the Navy would like to demolish the entire structure, due to its unsafe condition and the costs presented above to rehabilitate or renovate. Long-range plans would be to retain a number of the original piles and use them to secure floating docks to expand the current marina facility.

Based on these facts, NAS Whidbey Island recommends that this structure not be considered for nomination to the National Register of Historic Places and seeks your concurrence. Please direct your response to Mr. Matthew Klope at (360) 257-1009.

Sincerely,

K.A. Souders

K. A. SOUDERS
Director, Environmental Affairs
By direction of the
Commanding Officer